FIRST SOLAR, INC.
Form 10-Q
November 02, 2012

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

Form 10-Q

(Mark one)

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

For the quarterly period ended September 30, 2012

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 [ ] (Do not check if a smaller reporting company)	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 October 26, 2012, 87,027,809 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 SEPTEMBER 30, 2012

TABLE OF CONTENTS

		Page
Part I.	Financial Information (Unaudited)	
Item 1.	Condensed Consolidated Financial Statements:	
	Condensed Consolidated Statements of Operations for the three and nine months ended September 30, 2012 and September 30, 2011	3
	Condensed Consolidated Statements of Comprehensive Income (Loss) for the three and nine months ended September 30, 2012 and September 30, 2011	4
	Condensed Consolidated Balance Sheets as of September 30, 2012 and December 31, 2011	5
	Condensed Consolidated Statements of Cash Flows for the nine months ended September 30, 2012 and September 30, 2011	6
	Notes to Condensed Consolidated Financial Statements	7
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	44
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	73
Item 4.	Controls and Procedures	73
Part II.	Other Information	74
Item 1.	Legal Proceedings	74
Item 1A.	Risk Factors	74
Item 4.	Mine Safety Disclosures	75
Item 5.	Other Information	75
Item 6.	Exhibits	75
Signature		76

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 Months Ended		Nine Months Ended	
	September 30, 2012	September 30, 2011	September 30, 2012	September 30, 2011
Net sales	$839,147	$ 1,005,788	$2,293,534	$ 2,105,855
Cost of sales	600,431	626,624	1,734,332	1,272,228
Gross profit	238,716	379,164	559,202	833,627
Operating expenses:				
Research and development	32,372	38,164	100,821	102,617
Selling, general and administrative	73,507	112,743	217,511	286,615
Production start-up	1,595	5,514	6,186	27,739
Restructuring	24,197	—	444,262	—
Total operating expenses	131,671	156,421	768,780	416,971
Operating income (loss)	107,045	222,743	(209,578)	416,656
Foreign currency gain (loss)	3	(1,857)	34	752
Interest income	3,405	3,225	9,695	9,665
Interest expense, net	(2,902)	—	(11,194)	—
Other income (expense), net	3,210	(1,346)	665	656
Income (loss) before income taxes	110,761	222,765	(210,378)	427,729
Income tax expense	22,844	26,251	40,138	54,109
Net income (loss)	$87,917	$ 196,514	$(250,516)	$ 373,620
Net income (loss) per share:				
Basic	$1.01	$ 2.28	$(2.89)	$ 4.35
Diluted	$1.00	$ 2.25	$(2.89)	$ 4.29
Weighted-average number of shares used in per share calculations:				
Basic	86,992	86,338	86,785	85,946
Diluted	87,765	87,151	86,785	87,114

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 Months Ended		Nine Months Ended	
	September 30, 2012	September 30, 2011	September 30, 2012	September 30, 2011
Net income (loss)	$ 87,917	$ 196,514	$ (250,516)	$ 373,620
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments	2,600	(25,419)	6,314	5,170
Unrealized gain on marketable securities and restricted investments	11,009	30,371	19,571	18,897
Unrealized (loss) gain on derivative instruments	(9,879)	55,370	(22,594)	23,851
Other comprehensive income, net of tax	3,730	60,322	3,291	47,918
Comprehensive income (loss)	$ 91,647	$ 256,836	$ (247,225)	$ 421,538

See accompanying notes to these condensed consolidated financial statements.

FIRST SOLAR, INC. AND SUBSIDIARIES

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

	September 30, 2012	December 31, 2011
ASSETS		
Current assets:		
Cash and cash equivalents	$ 614,699	$ 605,619
Marketable securities	102,295	66,146
Accounts receivable trade, net	467,640	310,568
Accounts receivable, unbilled	398,945	533,399
Inventories	537,567	475,867
Balance of systems parts	125,012	53,784
Deferred project costs	143,392	197,702
Deferred tax assets, net	37,361	41,144
Assets held for sale	49,521	—
Note receivable affiliate	17,408	—
Prepaid expenses and other current assets	216,196	329,032
Total current assets	2,710,036	2,613,261
Property, plant and equipment, net	1,549,689	1,815,958
Project assets	250,812	374,881
Deferred project costs	374,941	122,688
Deferred tax assets, net	328,263	340,274
Marketable securities	—	116,192
Restricted cash and investments	285,573	200,550
Goodwill	65,444	65,444
Inventories	136,896	60,751
Other assets	280,075	67,615
Total assets	$ 5,981,729	$ 5,777,614
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 235,744	$ 176,448
Income taxes payable	6,982	9,541
Accrued expenses	575,156	406,659
Current portion of long-term debt	61,398	44,505
Deferred revenue	534	41,925
Other current liabilities	260,013	294,646
Total current liabilities	1,139,827	973,724
Accrued solar module collection and recycling liability	213,407	167,378
Long-term debt	468,294	619,143
Other liabilities	702,047	373,506
Total liabilities	2,523,575	2,133,751
Commitments and contingencies		
Stockholders' equity:		
Common stock, $0.001 par value per share; 500,000,000 shares authorized; 87,021,447 and 86,467,873 shares issued and outstanding at September 30, 2012 and December 31, 2011, respectively	87	86

Additional paid-in capital	2,084,257	2,022,743
Accumulated earnings	1,375,555	1,626,071
Accumulated other comprehensive loss	(1,745)	(5,037)
Total stockholders’ equity	3,458,154	3,643,863
Total liabilities and stockholders’ equity	$ 5,981,729	$ 5,777,614

See accompanying notes to these condensed consolidated financial statements.

FIRST SOLAR, INC. AND SUBSIDIARIES

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

	Nine Months Ended	
	September 30, 2012	September 30, 2011
Cash flows from operating activities:		
Cash received from customers	$2,300,563	$ 1,570,183
Cash paid to suppliers and associates	(1,811,748)	(1,488,358)
Interest received	3,644	8,287
Interest paid	(16,982)	(7,826)
Income tax refunds (payments), net	22,418	(44,052)
Excess tax benefit from share-based compensation arrangements	(61,571)	(79,741)
Other operating activities	(1,674)	(2,690)
Net cash provided by (used in) operating activities	434,650	(44,197)
Cash flows from investing activities:		
Purchases of property, plant and equipment	(339,213)	(613,861)
Purchases of marketable securities and investments	(18,842)	(195,819)
Proceeds from sales and maturities of marketable securities and investments	98,857	424,967
Investment in note receivable, affiliate	(21,659)	—
Payments received on note receivable, affiliate	4,369	—
Purchase of restricted investments	(80,667)	(62,748)
Change in restricted cash	20,264	(23,358)
Acquisitions, net of cash acquired	(2,437)	(21,105)
Other investing activities	(5,000)	(10,239)
Net cash used in investing activities	(344,328)	(502,163)
Cash flows from financing activities:		
Proceeds from stock option exercises	71	7,993
Repayments of borrowings under revolving credit facility	(780,000)	—
Proceeds from borrowings under revolving credit facility	815,000	—
Repayments of long-term debt	(173,212)	(327,821)
Proceeds from borrowings under long-term debt, net of discount and issuance costs	—	694,399
Excess tax benefit from share-based compensation arrangements	61,571	79,741
(Repayment of) proceeds from economic development funding	(6,820)	4,286
Other financing activities	(837)	(296)
Net cash (used in) provided by financing activities	(84,227)	458,302
Effect of exchange rate changes on cash and cash equivalents	2,985	929
Net increase (decrease) in cash and cash equivalents	9,080	(87,129)
Cash and cash equivalents, beginning of the period	605,619	765,689
Cash and cash equivalents, end of the period	$614,699	$ 678,560
Supplemental disclosure of noncash investing and financing activities:		
Property, plant and equipment acquisitions funded by liabilities	$56,590	$ 81,579
Settlement of long-term debt	$4,802	$ —

See accompanying notes to these condensed consolidated financial statements.

6

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 nine months ended September 30, 2012 are not necessarily indicative of the results that may be expected for the year ending December 31, 2012, or for any other period. The condensed consolidated balance sheet at December 31, 2011 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, 2011 included in our Annual Report on Form 10-K filed with the SEC.

During the nine months ended September 30, 2012, the Company corrected certain errors that had overstated net loss by $7.8 million for the year ended December 31, 2011, with such correction having the effect of reducing net loss by $7.8 million for the nine months ended September 30, 2012. Management has determined that the errors and correction did not have a material effect on current or prior periods.

Certain prior year balances have been reclassified to conform to the current year's presentation. Such reclassifications did not affect 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 t
First Solar, Inc. and its subsidiaries.

Note 2. Summary of Significant Accounting Policies

Use of Estimates. The preparation of consolidated financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions that affect the amounts reported in our consolidated financial statements and the accompanying notes. Significant estimates in these condensed consolidated financial statements include revenue recognition, inventory valuation, 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, accrued warranty and related expense, accrued collection and recycling expense, and fair value estimates. Despite our intention to establish accurate estimates and reasonable assumptions, actual results could differ materially from these estimates and assumptions.

Product Warranties. We provide a limited warranty against defects in materials and workmanship under normal use and service conditions for 10 years following delivery to the owners of our solar modules.

We also typically warrant to the owners of our solar modules that solar modules installed in accordance with agreed-upon specifications will produce at least 90% of their labeled power output rating during the first 10 years following their installation and at least 80% of their labeled power output rating during the following 15 years. In

resolving claims under both the defects and power output warranties, we have the option of either repairing or replacing the covered solar module or, under the power output warranty, providing additional solar modules to remedy the power shortfall. We also have the option to make a payment for the then current market price for solar modules to resolve claims. Our warranties are automatically transferred from the original purchasers of our solar modules to subsequent purchasers upon resale.

As an alternative to our module power output warranty, we have offered a system level module performance warranty for a limited number of our recent system sales. This system level module performance warranty is designed for utility scale systems and provides a 25 year plant-level energy degradation protection. The system level module performance warranty is calculated as a percentage of a systems expected energy production, adjusted for certain actual site conditions, with the warranted level of performance declining each year in a linear fashion, but never falling below 80% during the term of the warranty. In resolving claims under the system level module performance warranty to restore the system to warranted performance levels, we first must validate that the root cause is due to module performance, then we typically have the option of either repairing or replacing modules, providing supplemental modules or making a cash payment. Consistent with our module power output warranty, when we elect

to satisfy a valid warranty claim by providing replacement or supplement modules under the system level module performance warranty, we do not have any labor obligation to remove or install modules.

In addition to our solar module warranty described above, for solar power plants built by our systems business, we typically provide a limited warranty on the balance of the system (“BoS”) against defects in engineering design, installation, and workmanship for a period of one to two years following the substantial completion of a phase or the entire solar power plant. In resolving claims under the engineering design, installation, and workmanship warranties, we have the option of remedying the defect through repair, or replacement.

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. We make and revise these estimates based primarily on the number of our solar modules under warranty, 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 BoS components, and our estimated per-module 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 statement of operations if we commit to any such remediation actions.

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 using actual costs incurred over total estimated costs to 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. We periodically revise our contract cost, revenue, and profit estimates and we immediately recognize any losses that we identify on such contracts. 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 attached or fitted to the solar power systems as required by engineering designs. Solar modules 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.

For systems business sales arrangements that are accounted for under ASC 360, we record the sale as revenue using one of the following revenue recognition methods, based upon the substance and form of the terms and conditions of such sales arrangements:

(i) We apply the percentage-of-completion method to certain 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 be

met through the receipt of cash or an irrevocable letter of credit from a highly credit worthy lending institution.

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

(iii) We may also record revenue for certain sales arrangements after construction of a 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.

Inventories. We report our inventories at the lower of cost or market. We determine cost on a first-in, first-out basis and include both the costs of acquisition and the costs of manufacturing in our inventory costs. These costs include direct material, direct labor, and indirect manufacturing costs, including depreciation and amortization. Our capitalization of costs into inventory is based on

normal utilization of our plants. If production capacity is abnormally underutilized, the portion of our indirect manufacturing costs related to the abnormal underutilization levels is expensed as incurred.

We regularly review the cost of inventory against its 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. We also regularly evaluate the quantities and values of our inventories in light of current market conditions and market trends and record write-downs for any quantities in excess of demand and for any product obsolescence. This evaluation considers the use of modules in our systems business, historical usage, expected demand, anticipated sales price, desired strategic raw material requirements, new product development schedules, the effect new products might have on the sale of existing products, product obsolescence, customer concentrations, product merchantability, and other factors.

Long-Lived Assets. We account for any impairment of our long-lived tangible assets and definite-lived intangible assets in accordance with ASC 360, Property, Plant and Equipment. As a result, we assess long-lived assets classified as “held and used,” including our property, plant and equipment, for impairment whenever events or changes in business circumstances arise that may indicate that the carrying amount of our long-lived assets may not be recoverable. These events and changes can include significant current period operating or cash flow losses associated with the use of a long-lived asset, or group of assets, combined with a history of such losses, significant changes in the manner of use of assets, and current expectations that, it is more-likely-than-not, a long-lived asset will be sold or otherwise disposed of significantly before the end of its previously estimated useful life.

Idle Property, Plant and Equipment. For property, plant and equipment that has been placed into service, but is subsequently idled temporarily, we continue to record depreciation expense over the remaining estimated useful life of the idled property, plant and equipment.

Retainage. Certain of the engineering, procurement, and construction (“EPC”) contracts for solar power plants we build contain retainage provisions. 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. We consider whether collectability of such retainage is reasonably assured in connection with our overall assessment of the collectability of amounts due or that will become due under our EPC contracts. Retainage expected to be collected within the next 12 months is classified within accounts receivable, unbilled on the condensed consolidated balance sheet. Retainage expected to be collected after 12 months is classified within other assets on the condensed consolidated balance sheet. After we have met the EPC contract requirements to bill for retainage, we will reclassify such amounts to accounts receivable trade.

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, 2011 for a complete discussion of our significant accounting policies.

Note 3. Recent Accounting Pronouncements

In December 2011, the Financial Accounting Standards Board (“FASB”) issued ASU 2011-11, Balance Sheet (Topic 210), 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 is effective for fiscal years, and interim periods within those years, beginning on or after January 1, 2013. We do not expect the adoption of ASU 2011-11 in the first quarter of 2013 to have an impact on our consolidated 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 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. We do not expect the adoption of ASU 2012-02 in the first quarter of 2013 to have an impact on our consolidated financial position, results of operations, or cash flows.

Note 4. Restructuring

December 2011 Restructuring

In December 2011, executive management approved a set of restructuring initiatives intended to accelerate operating cost reductions and improve overall operating efficiency. In connection with these restructuring initiatives, we incurred total charges to operating expense of $60.4 million in the fourth quarter of 2011 and $0.3 million in the first nine months of 2012. These charges consisted of (i) $52.4 million of asset impairment and asset impairment related charges due to a significant reduction in certain research and development activities that had been focused on an alternative photovoltaic ("PV") product, and (ii) $8.3 million in severance benefits to terminated employees as described below, most of which is expected to be paid out by the end of 2012.

We have refocused our research and development center in Santa Clara, California on the development of advanced cadmium telluride PV technologies, compared to a broader research and development effort prior to December 2011. We eliminated approximately 100 positions company-wide as part of the restructuring initiatives. The related long-lived assets were considered abandoned for accounting purposes and were impaired to their estimated salvage value as of December 31, 2011.

The following table summarizes the balance at December 31, 2011, the activity during the nine months ended September 30, 2012, and the balance at September 30, 2012 (in thousands):

December 2011 Restructuring	Asset Impairments	Asset Impairment Related Costs	Severance and Termination Related Costs	Total
Ending Balance at December 31, 2011	$—	$2,346	$6,807	$9,153
Charges to Income	—	—	1,216	1,216
Change in Estimates	—	—	—	—
Cash Payments	—	(158)	(3,905)	(4,063)
Non-Cash Amounts	—	—	(166)	(166)
Ending Balance at March 31, 2012	—	2,188	3,952	6,140
Charges to Income	747	—	264	1,011
Change in Estimates	—	(1,933)	—	(1,933)
Cash Payments	—	—	(1,649)	(1,649)
Non-Cash Amounts	(747)	—	(264)	(1,011)
Ending Balance at June 30, 2012	—	255	2,303	2,558
Charges to Income	—	—	—	—
Change in Estimates	—	—	—	—
Cash Payments	—	—	(2,094)	(2,094)
Non-Cash Amounts	—	—	—	—
Ending Balance at September 30, 2012	$—	$255	$209	$464

Expenses recognized for the above restructuring activities are presented in "Restructuring" on the condensed consolidated statements of operations. Substantially all expenses related to the December 2011 restructuring were related to our components segment. We do not expect to incur additional expense related to such restructuring initiatives.

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. In connection with

these initiatives, we incurred total charges to operating expense of $131.6 million during the nine months ended September 30, 2012. These charges consisted of (i) $99.3 million of asset impairment and asset impairment related charges due to our decision not to proceed with our 4-line manufacturing plant in Vietnam, (ii) $25.3 million of asset impairment and asset impairment related charges due to our decision to cease use of certain manufacturing machinery and equipment intended for use in the production of certain components of our solar modules, and (iii) $7.0 million of asset impairment and asset impairment related charges primarily due to our decision to cease use of certain other long-lived assets.

Based upon expected future market demand and our focus on providing utility-scale PV generation solutions primarily to sustainable geographic markets, we decided not to proceed with our previously announced 4-line plant in Vietnam. As of March 31, 2012, the plant was considered “held for sale”, and a corresponding impairment charge of $92.2 million was recorded. The

Vietnam plant is classified as assets held for sale in the condensed consolidated balance sheet. The carrying amount of the Vietnam plant represents the fair value of the plant less expected costs to sell, with fair value being determined based upon a weighted approach using both the cost and income methods of valuation using market participant assumptions based primarily on observable inputs. Such fair value measurements are considered Level 2 measurements within the fair value hierarchy.

Additionally, certain manufacturing machinery and equipment intended for use in the production of certain components of our solar modules and certain other long-lived assets were considered abandoned for accounting purposes in February 2012. As a result, we recorded impairment charges of $29.2 million.

The following table summarizes the February 2012 manufacturing restructuring amounts recorded during the three and nine months ended September 30, 2012 and the remaining balance at September 30, 2012 (in thousands):

February 2012 Manufacturing Restructuring	Asset Impairments	Asset Impairment Related Costs	Total
Charges to Income	$121,190	$8,265	$129,455
Changes in Estimates	—	—	—
Cash Payments	—	—	—
Non-Cash Amounts	(121,190)	$(2,877)	(124,067)
Ending Balance at March 31, 2012	—	5,388	5,388
Charges to Income	1,575	214	1,789
Changes in Estimates	519	(128)	391
Cash Payments	—	(172)	(172)
Non-Cash Amounts	(2,094)	235	(1,859)
Ending Balance at June 30, 2012	—	5,537	5,537
Charges to Income	—	—	—
Changes in Estimates	—	—	—
Cash Payments	—	—	—
Non-Cash Amounts	—	(284)	(284)
Ending Balance at September 30, 2012	$—	$5,253	$5,253

Expenses recognized for the restructuring activities above are presented in “Restructuring” on the condensed consolidated statements of operations. All expenses related to the February 2012 manufacturing restructuring were related to our components segment. We do not expect to incur any additional expense for the above restructuring initiatives.

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 will substantially reduce our European operations including the closure of our manufacturing operations in Frankfurt (Oder), Germany by the end of 2012. Due to the lack of policy support for utility-scale solar projects in Europe, we do not believe there is a business case for continuing manufacturing operations in Germany. Additionally, we will substantially reduce the size of our operations in Mainz, Germany and elsewhere in Europe. We also temporarily idled the capacity of four production lines at our manufacturing center in Kulim, Malaysia in May 2012. These actions, combined with additional reductions in administrative and other staff in North America, will reduce First Solar’s workforce by approximately 2,000 associates once completed. After such actions are completed, First Solar’s manufacturing operations will consist of 24 production lines in Kulim, Malaysia and four production lines

in Perrysburg, Ohio, with a global workforce of approximately 6,000 associates.

The restructuring and related initiatives resulted in total charges of $312.3 million in the nine months ended September 30, 2012, including: (i) $231.0 million in asset impairments and asset impairment related charges, primarily related to the Frankfurt (Oder) plants; (ii) $50.9 million in severance and termination related costs; and (iii) $30.4 million for the required repayment of German government grants related to the second Frankfurt (Oder) plant.

Based primarily upon expected future market demand and the lack of policy support for utility-scale solar projects in Europe, we do not believe there is a business case for continuing manufacturing operations in Germany. We concluded that an impairment indicator existed as of March 31, 2012 related to our asset group that includes our manufacturing operations in Germany as it was

considered more-likely-than-not that operations for such asset group would be closed, and accordingly we performed a recoverability test in accordance with ASC 360. In performing the recoverability test, we concluded that the long-lived asset group was not recoverable after comparing the undiscounted future cash flows based on our own expected use and eventual disposition of the asset group at market value, to the asset group's carrying value. Such recoverability test included future cash flow assumptions that contemplated the potential closure of our manufacturing operations in Germany at the end of 2012.

As the asset group was not considered recoverable, we determined the fair value of the long-lived assets in the asset group in accordance with ASC 360 and ASC 820 based primarily on the cost method of valuation for the personal property and a weighted income method of valuation for the real property. Such fair value measurements for the personal and real property are considered Level 3 and Level 2 fair value measurements in the fair value hierarchy, respectively. We recorded an impairment charge of $225.0 million primarily related to the long-lived assets at our Frankfurt (Oder) plants. As the long-lived assets for our Frankfurt (Oder) plants are considered held and used under ASC 360, we continue to record depreciation expense over the estimated useful life of such assets using the new cost basis.

The following table summarizes the April 2012 European restructuring amounts recorded during the three and nine months ended September 30, 2012 and the remaining balance at September 30, 2012 (in thousands):

April 2012 Restructuring	Asset Impairments	Asset Impairment Related Costs	Severance and Termination Related Costs	Grant Repayments	Total
Charges to Income	224,226	5,844	10,502	29,822	270,394
Change in Estimates	—	—	—	—	—
Cash Payments	—	—	—	—	—
Non-Cash Amounts	(224,226)	—	—	(14,693)	(238,919)
Ending Balance at March 31, 2012	—	5,844	10,502	15,129	31,475
Charges to Income	766	—	16,812	452	18,030
Change in Estimates	—	(289)	—	—	(289)
Cash Payments	—	—	(5,877)	(7,044)	(12,921)
Non-Cash Amounts	(766)	—	—	—	(766)
Ending Balance at June 30, 2012	—	5,555	21,437	8,537	35,529
Charges to Income	501	—	23,579	117	24,197
Change in Estimates	—	—	—	—	—
Cash Payments	—	—	(6,281)	—	(6,281)
Non-Cash Amounts	(501)	83	(2,359)	(583)	(3,360)
Ending Balance at September 30, 2012	$—	$5,638	$36,376	$8,071	$50,085

Expenses recognized for the restructuring activities are presented in "Restructuring" on the condensed consolidated statements of operations. Substantially all expenses related to the April 2012 restructuring were related to our components segment. We expect to incur between $20 million and $40 million in additional restructuring expense through the first half of 2013 primarily related to remaining severance and termination related costs and asset impairment related costs associated with such restructuring initiatives.

Note 5. Acquisitions

Ray Tracker

On January 4, 2011, we acquired 100% of the ownership interest of Ray Tracker, Inc. (“Ray Tracker”), a tracking technology and photovoltaic balance of systems parts business in an all-cash transaction, which was not material to our condensed consolidated balance sheets and results of operations. We have included the financial results of Ray Tracker in our condensed consolidated financial statements from the date of acquisition.

Note 6. Goodwill

The changes in the carrying amount of goodwill, which is generally deductible for tax purposes, for our components and systems reporting units for the nine months ended September 30, 2012 were as follows (in thousands):

	Components	Systems	Consolidated
Ending balance, December 31, 2011	$—	$65,444	$65,444
Ending balance, September 30, 2012	$—	$65,444	$65,444

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

In performing a goodwill impairment test under ASC 350, we may first make a qualitative assessment of whether it is more-likely-than-not that a reporting unit's fair value is less than its carrying value to determine whether it is necessary to perform a two-step quantitative goodwill impairment test. If it is determined through the qualitative assessment that a reporting unit's fair value is more-likely-than-not greater than its carrying value, the two-step quantitative impairment test is not required. If the qualitative assessment indicates it is more-likely-than-not that a reporting unit's fair value is not greater than its carrying value, we must perform the two-step quantitative impairment test. We may also elect to proceed directly to the two-step impairment test without considering such qualitative factors.

During the fourth quarter of 2011, we commenced our annual goodwill impairment test for 2011 and after considering qualitative factors including the continuing reduction in our market capitalization during December 2011 and our new business strategy and 2012 outlook announced in December 2011, we concluded that a two-step goodwill quantitative impairment test was required for both of our reporting units.

In performing the first step of the two-step quantitative impairment test, we determined that the fair value of our systems reporting unit exceeded the carrying value by a significant amount indicating no impairment was necessary for the systems reporting unit in the fourth quarter of 2011.

We also performed the first and second steps of the two-step quantitative impairment test for the components reporting unit and determined that the implied fair value of goodwill in the components reporting unit was zero. As a result, we impaired all of the goodwill in the components reporting unit in the fourth quarter of 2011. As of December 31, 2011 and September 30, 2012, our gross goodwill and accumulated goodwill impairment losses were $393.4 million for our components reporting unit.

As of September 30, 2012, we made an assessment of whether it was more-likely-than-not that the systems reporting unit's fair value was less than its carrying value to determine whether an interim goodwill impairment test should be performed. The events and circumstances that we considered in this assessment included our restructuring activities and the decline in our stock price since the date of our last annual goodwill impairment test. We expect our restructuring activities to primarily impact the components reporting unit with a limited unfavorable impact to the operating results or cash flows of our systems reporting unit. We also considered the decline in our stock price and related market capitalization since our last annual goodwill impairment test. Our assessment of whether an interim impairment test should be performed in the third quarter of 2012 also considered that the first step of our last annual goodwill impairment test indicated the fair value of our systems reporting unit exceeded the carrying value by a significant amount. Other factors that we considered included the expectation that our forecasted cash inflows related to our systems business project pipeline and related contract pricing has not changed significantly since our last annual goodwill impairment test. Based upon the weight of the positive, negative and neutral qualitative factors, we concluded it was more-likely-than-not that the fair value of our systems reporting unit was greater than its carrying value and as a result, an interim goodwill impairment test was not required as of September 30, 2012.

Note 7. Cash, Cash Equivalents, and Marketable Securities

Cash, cash equivalents, and marketable securities consisted of the following at September 30, 2012 and December 31, 2011 (in thousands):

	September 30, 2012	December 31, 2011
Cash:		
Cash	$ 602,560	$ 579,241
Cash equivalents:		
Commercial paper	1,500	—
Money market mutual funds	10,639	26,378
Total cash and cash equivalents	614,699	605,619
Marketable securities:		
Commercial paper	3,394	9,193
Corporate debt securities	26,962	55,011
Federal agency debt	24,526	50,081
Foreign agency debt	5,916	10,928
Foreign government obligations	5,156	9,120
Supranational debt	34,335	45,991
U.S. government obligations	2,006	2,014
Total marketable securities	102,295	182,338
Total cash, cash equivalents, and marketable securities	$ 716,994	$ 787,957

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. We report realized gains and losses on the sale or maturity of our marketable securities in earnings, 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 sheet. During the three and nine months ended September 30, 2012, we realized an immaterial amount of gains and an immaterial amount of losses on our marketable securities. During the three and nine months ended September 30, 2011, we realized an immaterial amount and $0.9 million, respectively, of gains and an immaterial amount of losses on our marketable securities. See Note 11. “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 earnings 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 September 30, 2012 and December 31, 2011.

The following tables summarize the unrealized gains and losses related to our marketable securities, by major security type, as of September 30, 2012 and December 31, 2011 (in thousands):

	As of September 30, 2012			
Security Type	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Commercial paper	$3,395	$—	$1	$3,394
Corporate debt securities	26,927	35	—	26,962

Federal agency debt	24,473	53	—	24,526
Foreign agency debt	6,005	—	89	5,916
Foreign government obligations	5,149	7	—	5,156
Supranational debt	34,247	88	—	34,335
U.S. government obligations	1,999	7	—	2,006
Total	$102,195	$190	$90	$102,295

Security Type	As of December 31, 2011 Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Commercial paper	$9,192	$1	$—	$9,193
Corporate debt securities	55,150	13	152	55,011
Federal agency debt	50,035	54	8	50,081
Foreign agency debt	11,473	—	545	10,928
Foreign government obligations	9,128	1	9	9,120
Supranational debt	46,380	—	389	45,991
U.S. government obligations	1,999	15	—	2,014
Total	$183,357	$84	$1,103	$182,338

Contractual maturities of our marketable securities as of September 30, 2012 and December 31, 2011 were as follows (in thousands):

Maturity	As of September 30, 2012 Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
One year or less	$72,379	$73	$90	$72,362
One year to two years	26,897	102	—	26,999
Two years to three years	2,919	15	—	2,934
Total	$102,195	$190	$90	$102,295

Maturity	As of December 31, 2011 Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
One year or less	$66,146	$30	$30	$66,146
One year to two years	97,538	54	854	96,738
Two years to three years	19,673	—	219	19,454
Total	$183,357	$84	$1,103	$182,338

The net unrealized gain of $0.1 million and loss of $1.0 million as of September 30, 2012 and December 31, 2011, 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.

The following table shows gross unrealized losses and estimated fair values for those marketable securities and investments that were in an unrealized loss position as of September 30, 2012 and December 31, 2011, aggregated by major security type and the length of time the marketable securities have been in a continuous loss position (in thousands):

	As of September 30, 2012					
	In Loss Position for Less Than 12 Months		In Loss Position for 12 Months or Greater		Total	
Security Type	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
Commercial Paper	$1,695	$1	$—	$—	$1,695	$1

Foreign agency debt	5,916	89	—	—	5,916	89
Total	$7,611	$90	$—	$—	$7,611	$90

	As of December 31, 2011					
	In Loss Position for Less Than 12 Months		In Loss Position for 12 Months or Greater		Total	
Security Type	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses	Estimated Fair Value	Gross Unrealized Losses
Corporate debt securities	$47,763	$152	$—	$—	$47,763	$152
Federal agency debt	6,744	8	—	—	6,744	8
Foreign agency debt	8,176	545	—	—	8,176	545
Foreign government obligations	6,361	9	—	—	6,361	9
Supranational debt	45,991	389	—	—	45,991	389
Total	$115,035	$1,103	$—	$—	$115,035	$1,103

Note 8. Restricted Cash and Investments

Restricted cash and investments consisted of the following at September 30, 2012 and December 31, 2011 (in thousands):

	September 30, 2012	December 31, 2011
Restricted cash, noncurrent	$ 179	$ 21,735
Restricted investments, noncurrent	285,394	178,815
Restricted cash and investments, noncurrent (1)	$ 285,573	$ 200,550

(1) There is $1.0 million of restricted cash included within prepaid expenses and other current assets.

On May 18, 2011, in connection with the plant expansion at our German manufacturing center, First Solar Manufacturing GmbH (“FSM GmbH”), our indirect wholly owned subsidiary, entered into a credit facility agreement (“German Facility Agreement”). Pursuant to the German Facility Agreement, FSM GmbH was required to maintain a euro-denominated debt service reserve account in the amount of €16.6 million ($21.6 million at the balance sheet close rate on December 31, 2011 of $1.30/€1.00) pledged in favor of the lenders. The account was available solely to pay any outstanding interest and principal payments owed under the German Facility Agreement and was a component of our “restricted cash” balance at December 31, 2011. In April 2012, we repaid the entire balance outstanding under the German Facility Agreement and the restriction on the cash related to such debt service reserve account was removed. The restricted cash attributable to the debt service reserve account was reclassified to cash and cash equivalents. See Note 14. “Debt,” for further information.

At September 30, 2012 and December 31, 2011, our restricted investments consisted of long-term marketable securities that we hold through a custodial account to fund the estimated future costs of our solar module collection and recycling program 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. We report realized gains and losses on the maturity or sale of our restricted investments in earnings, computed using the specific identification method.

We annually fund the estimated future collection and recycling cost for the prior year’s module shipments covered by our recycling program, within approximately 90 days from the end of each calendar year, assuming for this purpose a minimum service life of 25 years for our solar modules. To ensure that our collection and recycling program is available for covered modules 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 under which funds are put into custodial accounts with a large bank as the investment advisor in the name of a trust, for which First Solar, Inc.

(“FSI”), First Solar Malaysia Sdn. Bhd. (“FS Malaysia”), and 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 for administering our solar module collection and recycling program. Future collection and recycling activities will be performed either by us or a third party. Cash invested in this custodial account must be invested in highly rated securities, such as highly rated government or agency bonds. We closely monitor our exposure to European markets and maintain holdings of German and French sovereign debt securities which are not currently at risk of default.

The following table summarizes unrealized gains and losses related to our restricted investments by major security type as of September 30, 2012 and December 31, 2011 (in thousands):

Security Type	As of September 30, 2012 Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Foreign government obligations	$181,580	$38,213	$—	$219,793
U.S. government obligations	52,813	12,788	—	65,601
Total	$234,393	$51,001	$—	$285,394

Security Type	As of December 31, 2011 Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Foreign government obligations	$132,734	$23,102	$—	$155,836
U.S. government obligations	15,825	7,154	—	22,979
Total	$148,559	$30,256	$—	$178,815

As of September 30, 2012, the contractual maturities of these restricted investments were between 15 years and 24 years. As of December 31, 2011, the contractual maturities of these restricted investments were between 16 years and 24 years.

Note 9. Consolidated Balance Sheet Details

Accounts receivable trade, net

Accounts receivable trade, net consisted of the following at September 30, 2012 and December 31, 2011 (in thousands):

	September 30, 2012	December 31, 2011
Accounts receivable trade, gross	$ 480,575	$ 320,600
Allowance for doubtful accounts	(12,935)	(10,032)
Accounts receivable trade, net	$ 467,640	$ 310,568

At September 30, 2012, $71.9 million 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

Accounts receivable, unbilled represents revenue that has been recognized in advance of billing the customer. This is common for 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. Once we meet the billing criteria under a construction contract, we bill our customer accordingly and reclassify the Accounts receivable, unbilled to Accounts receivable trade, net. Billing requirements vary by contract but are generally structured around completion of certain construction milestones.

Included within Accounts receivable, unbilled 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.

Accounts receivable, unbilled were $398.9 million (including $17.0 million of retainage) and $533.4 million (including $35.4 million of retainage) at September 30, 2012 and December 31, 2011, respectively.

Inventories

Inventories consisted of the following at September 30, 2012 and December 31, 2011 (in thousands):

	September 30, 2012	December 31, 2011
Raw materials	$ 188,845	$ 230,675
Work in process	7,244	28,817
Finished goods	478,374	277,126
Inventories	$ 674,463	$ 536,618
Inventories — current	$ 537,567	$ 475,867
Inventories — noncurrent (1)	$ 136,896	$ 60,751

(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. The increase in our noncurrent inventories was primarily the result of a decrease in the amount of such critical raw material we anticipate consuming in our next operating cycle. Such decrease resulted from a combination of the planned reduction in our manufacturing capacity and the amount of critical raw material for our next operating cycle that is required to be sourced through vendor supply agreements.

Prepaid expenses and other current assets

Prepaid expenses and other current assets consisted of the following at September 30, 2012 and December 31, 2011 (in thousands):

	September 30, 2012	December 31, 2011
Prepaid expenses	$ 36,313	$ 151,630
Derivative instruments	2,842	63,673
Deferred costs of goods sold	95,940	1,152
Other assets — current	81,101	112,577
Prepaid expenses and other current assets	$ 216,196	$ 329,032

Property, plant and equipment, net

Property, plant and equipment, net consisted of the following at September 30, 2012 and December 31, 2011 (in thousands):

	September 30, 2012	December 31, 2011
Buildings and improvements	$ 438,672	$ 393,676
Machinery and equipment	1,367,752	1,453,293
Office equipment and furniture	115,616	110,936
Leasehold improvements	54,299	48,374
Depreciable property, plant and equipment, gross	1,976,339	2,006,279
Accumulated depreciation	(777,044)	(617,787)
Depreciable property, plant and equipment, net	1,199,295	1,388,492
Land	22,348	8,065
Construction in progress (1)	328,046	419,401
Property, plant and equipment, net	$ 1,549,689	$ 1,815,958

(1) Included within construction in progress as of September 30, 2012 is $222.8 million of machinery and equipment (“stored assets”) that was originally purchased for installation in our previously planned manufacturing capacity expansions. We intend to install and place the stored assets into service once market demand supports such additional manufacturing capacity. As the stored assets are neither in the condition or location to produce modules

as intended, we will not begin depreciation until the assets are placed into service. The stored assets are evaluated for impairment whenever events or changes in business circumstances arise that may indicate that the carrying amount of the stored assets may not be recoverable.

See Note 12. “Economic Development Funding,” to our condensed consolidated financial statements for further information about grants recorded as a reduction to the carrying value of the property, plant and equipment related to the expansion of our manufacturing plant in Frankfurt (Oder), Germany.

Depreciation of property, plant and equipment was $65.6 million and $60.8 million for the three months ended September 30, 2012 and September 30, 2011, respectively, and was $202.3 million and $162.3 million for the nine months ended September 30, 2012 and September 30, 2011, respectively.

In December 2011, February 2012, and April 2012, we announced a series of restructuring initiatives. As part of those initiatives, certain property, plant and equipment were determined to be impaired and impairment charges were recorded. See Note 4. “Restructuring,” for more information on the long-lived asset impairments related to these restructuring initiatives.

Capitalized interest

We capitalized interest costs incurred into property, plant and equipment or project assets as follows during the three and nine months ended September 30, 2012 and September 30, 2011 (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2012	September 30, 2011	September 30, 2012	September 30, 2011
Interest cost incurred	$(4,254)	$ (4,847)	$(20,304)	$ (8,638)
Interest cost capitalized —– property, plant and equipment	715	1,442	3,538	4,553
Interest cost capitalized —– project assets	637	3,405	5,572	4,085
Interest expense, net	$(2,902)	$ —	$(11,194)	$ —

Project assets

Project assets consist primarily of costs relating to solar power projects in various stages of development that we capitalize prior to entering into a definitive sales agreement for the solar power project. These costs include costs for land and costs for developing and constructing a PV solar power plant. Development costs can include legal, consulting, permitting, interconnect, 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. 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 a solar power project and the time required to complete all activities to sell a specific project, which is typically longer than 12 months.

Project assets consisted of the following at September 30, 2012 and December 31, 2011 (in thousands):

	September 30, 2012	December 31, 2011
Project assets — land	$ 8,900	$ 13,704
Project assets — development costs	142,848	136,251
Project assets — construction costs	99,064	224,926
Project assets	$ 250,812	$ 374,881

We review project assets for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. We consider a project commercially viable or recoverable if it is anticipated to be sold for a profit once it is either fully developed or fully constructed. We consider a partially developed or partially

constructed project commercially viable or recoverable if the anticipated selling price is higher than the carrying value of the related project assets. We examine a number of factors to determine if the project will be recoverable, the most notable of which include whether there are any changes in environmental, ecological, permitting, market pricing or regulatory conditions that impact the project. Such changes could cause the cost of the project to increase or the selling price of the project to decrease. If a project is not considered recoverable, we impair the respective project assets and adjust the carrying value to the estimated recoverable amount, with the resulting impairment recorded within operations.

Deferred project costs

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 and 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. As of September 30, 2012, deferred project costs were $518.3 million, of which, $143.4 million was classified as current and $374.9 million was classified as noncurrent. As of December 31, 2011, our deferred project costs were $320.4 million, of which $197.7 million was classified as current and $122.7 million was classified as noncurrent. 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.

Note Receivable

On April 8, 2009, we entered into a credit facility agreement with a solar project entity of one of our customers for an available amount of €17.5 million ($22.6 million at the balance sheet close rate on September 30, 2012 of $1.29/€1.00) to provide financing for a PV power generation facility. 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 September 30, 2012 and December 31, 2011, the balance on this credit facility was €7.0 million ($9.0 million at the balance sheet close rate on September 30, 2012 of $1.29/€1.00). The outstanding amount of this credit facility is included within “Other assets” on our condensed consolidated balance sheets.

Other Assets

Other assets consisted of the following at September 30, 2012 and December 31, 2011 (in thousands):

	September 30, 2012	December 31, 2011
Retainage (1)	$ 225,483	$ —
Other assets - noncurrent	54,592	67,615
Other assets	$ 280,075	$ 67,615

(1) Certain of the EPC contracts for solar power plants we build contain retainage provisions. Retainage refers to the portion of the EPC 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. We consider whether collectability of such retainage is reasonably assured in connection with our overall assessment of the collectability of amounts due or that will become due under our EPC contracts. Retainage expected to be collected within the next 12 months is classified within Accounts receivable, unbilled on the condensed consolidated balance sheet. After we have met the EPC contract requirements to bill for retainage, we will reclassify such amounts to Accounts receivable trade, net. Amounts are expected to be collected in 2013 through 2015, after certain construction milestones have been met.

Accrued expenses

Accrued expenses consisted of the following at September 30, 2012 and December 31, 2011 (in thousands):

	September 30, 2012	December 31, 2011
Accrued compensation, benefits and severance	$ 97,128	$ 57,480
Accrued property, plant and equipment	27,979	41,015

Accrued inventory	61,063	46,028
Accrued project assets and deferred project costs	97,880	34,837
Product warranty liability (Note 15)	82,795	78,637
Accrued expenses in excess of normal product warranty liability and related expenses (1)	116,655	89,893
Other accrued expenses	91,656	58,769
Accrued expenses	$ 575,156	$ 406,659

(1) $100.9 million of accrued expenses in excess of normal product warranty liability and related expenses as of September 30, 2012 consisted 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. The accrued expense as of September 30, 2012 included the following commitments to certain customers, each related to the 2008-2009 manufacturing excursion and our related remediation program: (i) $61.9 million in estimated expenses for remediation efforts related to module removal, replacement and logistical services committed to by us beyond the normal product warranty; and (ii) $37.8 million in estimated compensation payments to customers, under certain circumstances, for power lost prior to remediation of the customer's system under our remediation program.

$15.8 million of accrued expenses in excess of normal product warranty liability and related expenses as of September 30, 2012 consisted of commitments to certain customers related to a workmanship issue potentially affecting a limited number of solar modules manufactured between October 2008 to June 2009. 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. We know the serial numbers of the affected modules and are proactively contacting the system owners to repair or replace the potentially impaired modules currently in service in a manner consistent with our normal workmanship warranty. For roof-mounted systems, we will also remove and replace the affected modules at no cost to the system owner, which remediation is in excess of our limited workmanship warranty obligation.

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 revenue within the next 12 months.

Other current liabilities

Other current liabilities consisted of the following at September 30, 2012 and December 31, 2011 (in thousands):

	September 30, 2012	December 31, 2011
Derivative instruments	$ 10,427	$ 37,342
Deferred tax liabilities	1,898	6,612
Payments and billings for deferred project costs and deferred cost of sales (1)	224,759	192,440
Other liabilities — current	22,929	58,252
Other current liabilities	$ 260,013	$ 294,646

(1) Payments and billings for deferred project costs and deferred cost of sales represent customer payments received or customer billings made under the terms of certain solar power project related sales contracts for which all revenue recognition criteria for real estate transactions under ASC 360 have not yet been met. Such solar power project related costs are included as current deferred project costs or other current assets.

Other liabilities

Other liabilities consisted of the following at September 30, 2012 and December 31, 2011 (in thousands):

	September 30, 2012	December 31, 2011
Product warranty liability	$ 94,419	$ 79,105
Other taxes payable	96,481	73,054
Payments and billings for deferred project costs and deferred cost of sales (1)	468,562	167,374
Other liabilities — noncurrent	42,585	53,973
Other liabilities	$ 702,047	$ 373,506

(1) Payments and billings for deferred project costs and deferred cost of sales represent customer payments received or customer billings made under the terms of certain solar power project related sales contracts for which all revenue recognition criteria for real estate transactions under ASC 360 have not yet been met. Such solar power project related costs are included as noncurrent deferred project costs.

Note 10. 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. Our use of derivative instruments is subject to internal controls based on centrally defined, performed, and controlled policies and procedures.

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. These accounting approaches, the various risks that we are exposed to in our business and our use of derivative instruments to manage these risks are described below. See Note 11. "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 September 30, 2012 and December 31, 2011 (in thousands):

	September 30, 2012		
	Prepaid Expenses and Other Current Assets	Other Current Liabilities	Other Liabilities
Derivatives designated as hedging instruments under ASC 815:			
Foreign exchange forward contracts	$315	$9,000	$—
Cross-currency swap contract	—	227	2,502
Interest rate swap contracts	—	516	1,084
Total derivatives designated as hedging instruments	$315	$9,743	$3,586
Derivatives not designated as hedging instruments under ASC 815:			
Foreign exchange forward contracts	$2,527	$684	$—
Total derivatives not designated as hedging instruments	$2,527	$684	$—
Total derivative instruments	$2,842	$10,427	$3,586

	December 31, 2011		
	Prepaid Expenses and Other Current Assets	Other Current Liabilities	Other Liabilities
Derivatives designated as hedging instruments under ASC 815:			
Foreign exchange forward contract	$28,415	$—	$—
Cross-currency swap contracts	—	—	4,943
Interest rate swap contracts	—	444	2,127
Total derivatives designated as hedging instruments	$28,415	$444	$7,070
Derivatives not designated as hedging instruments under ASC 815:			
Foreign exchange forward contracts	$35,258	$36,898	$—
Total derivatives not designated as hedging instruments	$35,258	$36,898	$—
Total derivative instruments	$63,673	$37,342	$7,070

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 nine months ended September 30, 2012 and September 30, 2011 (in thousands):

	Foreign Exchange Forward Contracts	Interest Rate Swap Contracts	Cross Currency Swap Contract	Total
Balance in other comprehensive income (loss) at December 31, 2011	$33,751	$(2,571)	$(5,899)	$25,281
Amounts recognized in other comprehensive (loss) income	(11,341)	(914)	4,347	(7,908)
Amounts reclassified to earnings impacting:				
Net sales	(6,710)	—	—	(6,710)
Foreign currency gain	—	—	(5,003)	(5,003)
Interest expense	—	244	71	315
Balance in other comprehensive income (loss) at March 31, 2012	15,700	(3,241)	(6,484)	5,975
Amounts recognized in other comprehensive income (loss)	5,825	(334)	(5,989)	(498)
Amounts reclassified to net sales as a result of forecasted transactions being probable of not occurring	(3,385)	—	—	(3,385)
Amounts reclassified to earnings impacting:				
Foreign currency loss	—	—	5,382	5,382
Interest expense	—	2,084	131	2,215
Balance in other comprehensive income (loss) at June 30, 2012	18,140	(1,491)	(6,960)	9,689
Amounts recognized in other comprehensive (loss) income	(7,002)	(301)	3,568	(3,735)
Amounts reclassified to net sales as a result of forecasted transactions being probable of not occurring	$(987)	$—	$—	$(987)
Amounts reclassified to earnings impacting:				
Net Sales	(1,593)	—	—	(1,593)
Foreign currency gain	—	—	(5,654)	(5,654)
Interest expense	—	192	85	277
	$8,558	$(1,600)	$(8,961)	$(2,003)

Balance in other comprehensive income (loss) at September 30, 2012

	Foreign Exchange Forward Contracts	Interest Rate Swap Contracts	Cross Currency Swap Contract	Total
Balance in other comprehensive (loss) income at December 31, 2010	$(1,448)	$(1,219)	$—	$(2,667)
Amounts recognized in other comprehensive (loss) income	(53,752)	717	—	(53,035)
Amounts reclassified to earnings impacting:				
Net sales	12,380	—	—	12,380
Interest expense	—	205	—	205
Balance in other comprehensive (loss) income at March 31, 2011	(42,820)	(297)	—	(43,117)
Amounts recognized in other comprehensive (loss) income	(14,393)	(533)	—	(14,926)
Amounts reclassified to earnings impacting:				
Net sales	26,154	—	—	26,154
Interest expense	—	200	—	200
Balance in other comprehensive (loss) income at June 30, 2011	(31,059)	(630)	—	(31,689)
Amounts recognized in other comprehensive (loss) income	54,925	(987)	—	53,938
Amounts reclassified to earnings impacting:				
Net sales	6,308	—	—	6,308
Interest expense	—	183	—	183
Balance in other comprehensive (loss) income at September 30, 2011	$30,174	$(1,434)	$—	$28,740

We recorded immaterial amounts of unrealized losses related to ineffective portions of our derivative instruments designated as cash flow hedges during the three and nine months ended September 30, 2012 and September 30, 2011 directly to other income (expense). In addition, we recognized unrealized losses of $0.2 million and gains of $1.7 million related to amounts excluded from effectiveness testing for our foreign exchange forward contracts designated as cash flow hedges within other income (expense) during the three and nine months ended September 30, 2012, respectively. We recognized an immaterial amount of unrealized losses related to amounts excluded from effectiveness testing for our foreign exchange forward contracts designated as cash flow hedges within other income (expense) during the three and nine months ended September 30, 2011.

The following table presents the amounts related to derivative instruments not designated as cash flow hedges under ASC 815 affecting our consolidated statements of operations for the three and nine months ended September 30, 2012 and September 30, 2011 (in thousands):

		Amount of Gain (Loss) Recognized in Income on Derivatives			
Derivatives not designated as hedging instruments under ASC 815:	Location of Gain (Loss) Recognized in Income on Derivatives	Three Months Ended September 30, 2012	Three Months Ended September 30, 2011	Nine Months Ended September 30, 2012	Nine Months Ended September 30, 2011
Foreign exchange forward contracts	Foreign currency gain	$3,857	$1,872	2,334	2,340
Foreign exchange forward contracts	Cost of sales	$(257)	$(2,894)	(995)	1,008

Interest Rate Risk

We use cross-currency swap contracts 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 November 16, 2011, we entered into an interest rate swap contract to hedge a portion of the floating rate loans under our German Facility Agreement, which became effective on November 18, 2011 with an initial notional value of €50.0 million and pursuant to which we were entitled to receive a three-month floating interest rate, the Euro Interbank Offered Rate (“EURIBOR”), and were required to pay a fixed rate of 1.985%. This derivative instrument qualified 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 December 31, 2011. As of March 31, 2012, we discontinued hedge accounting for this interest rate swap contract as the forecasted interest payments were no longer probable of occurring as originally scheduled. On April 17, 2012, we terminated this swap and realized a loss of €1.5 million ($1.9 million at the period average rate of $1.28/€1.00) as the forecasted interest payments were probable of not occurring, which amount was included within interest expense.

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 MYR465.0 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. The notional amount of the swap is scheduled to decline in correspondence to our scheduled principal payments on the underlying hedged debt. As of September 30, 2012 the notional value of this cross-currency swap agreement was MYR465.0 million. 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 September 30, 2012 and December 31, 2011. For the three and nine months ended September 30, 2011 and September 30, 2012, there was no 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 interest rate, EURIBOR, 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 September 30, 2012, the notional value of this interest rate swap contract was €29.1 million. 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 September 30, 2012 and December 31, 2011. For the three and nine months ended September 30, 2011 and September 30, 2012, there was no ineffectiveness from this cash flow hedge.

In the following 12 months, we expect to reclassify to earnings $0.7 million of net unrealized losses related to the interest rate swap contract and cross-currency swap contract that are included in accumulated other comprehensive income (loss) at September 30, 2012 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 revenues and expenses that will be denominated in currencies other than the subsidiaries' functional currency. Our primary cash flow exposures are revenues and expenses. Changes in the exchange rates between our subsidiaries' functional currencies 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 September 30, 2012 and December 31, 2011, these foreign exchange forward contracts hedged our forecasted cash flows for up to 6 months and 12 months, respectively. These foreign exchange forward contracts qualify for accounting as cash flow hedges in accordance with ASC 815, and we designated them as such. We initially report the effective portion of 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 September 30, 2012 and December 31, 2011. During the three and nine months ended September 30, 2012 and September 30, 2011, we did not discontinue any cash flow hedges because a hedging relationship was no longer highly effective.

During the three and nine months ended September 30, 2012, we did not purchase any foreign exchange forward contracts that qualify as new cash flow hedges. However, certain foreign exchange forward contracts purchased in prior periods to hedge the exchange rate risk on forecasted cash flows denominated in Canadian dollar remained outstanding. As of September 30, 2012 and December 31, 2011, the notional values associated with our foreign exchange forward contracts were as follows (notional amounts and U.S. dollar equivalents in millions):

September 30, 2012

Currency	Notional Amount	USD Equivalent	Weighted Average Forward Exchange Rate September 30, 2012	Balance sheet close rate on September 30, 2012
Canadian dollar	CAD192.0	$186.5	$0.97/CAD1.00	$0.98/CAD1.00

December 31, 2011

Currency	Notional Amount	USD Equivalent	Weighted Average Forward Exchange Rate December 31, 2011	Balance sheet close rate on December 31, 2011
Euro	€81.0	$105.3	$1.37/€1.00	$1.30/€1.00
Canadian dollar	CAD 340.0	$333.2	$1.05/CAD1.00	$0.98/CAD1.00
Australian dollar	AUD 8.0	$8.2	$1.03/AUD1.00	$1.02/AUD1.00

As of September 30, 2012, the net unrealized gain on these contracts was $7.5 million. As of December 31, 2011, the net unrealized gain on these contracts was $31.2 million.

In the following 12 months, we expect to reclassify to earnings $7.5 million of net unrealized gains related to these forward contracts that are included in accumulated other comprehensive income (loss) at September 30, 2012 as we realize the earnings effect of the related forecasted transactions. The amount we ultimately record to earnings will depend on the actual exchange rate when we realize the related forecasted transactions.

During 2011 and the nine months ended September 30, 2012, we determined that certain forecasted transactions were no longer probable of occurring and we discontinued hedge accounting for those foreign exchange forward contracts in accordance with ASC 815. In the following 12 months, we expect to reclassify to earnings $1.1 million of net unrealized gains related to such discontinued foreign exchange forward contracts from accumulated other comprehensive income (loss) at September 30, 2012. Although these contracts are no longer designated as cash flow hedges, the related unrealized gains still receive hedge accounting treatment until it is probable that the forecasted transaction will not occur as originally expected.

Transaction Exposure and Economic Hedging

Many subsidiaries of our business have assets and liabilities (primarily receivables, 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 financial position, results 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.

During the three and nine months ended September 30, 2012, we purchased 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 "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 September 30, 2012, the total net unrealized gain on our economic hedge foreign exchange forward contracts was $0.8

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 3 months.

As of September 30, 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):

Transaction	Currency	Notional Amount	USD Equivalent	Balance sheet close rate on September 30, 2012
Purchase	Euro	€179.4	$231.3	$1.29/€1.00
Sell	Euro	€102.8	$132.6	$1.29/€1.00
Sell	Australian dollar	AUD 5.0	$5.2	$1.04/AUD1.00
Purchase	Malaysian ringgit	MYR 119.8	$39.5	$0.33/MYR1.00
Purchase	Canadian dollar	CAD 36.2	$35.5	$0.98/CAD1.00
Sell	Canadian dollar	CAD 43.4	$42.7	$0.98/CAD1.00

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

Note 11. Fair Value Measurements

ASC 820, Fair Value Measurements and Disclosures, defines fair value, establishes a framework for measuring fair value in accordance with generally accepted accounting principles, and provides financial statement disclosure requirements for fair value measurements. ASC 820 defines fair value as the price that would be received from the sale of an asset or paid to transfer a liability (an exit price) on the measurement date in an orderly transaction between market participants in the principal or most advantageous market for the asset or liability. ASC 820 specifies a hierarchy of valuation techniques, which is based on whether the inputs into the valuation technique are observable or unobservable. The hierarchy is as follows:

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

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

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

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

- Cash equivalents. At September 30, 2012, our cash equivalents consisted of commercial paper and money market mutual funds. At December 31, 2011, our cash equivalents consisted of 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 September 30, 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. At December 31, 2011, 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 September 30, 2012 and December 31, 2011, 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.

- Solar module collection and recycling program liability. We account for our obligation to collect and recycle the solar modules that we sell covered by the program in a similar manner to the accounting for asset retirement obligations that is prescribed by ASC 410, Asset Retirement and Environmental Obligations. When we sell solar modules, we initially record our estimated liability for collecting and recycling those particular solar modules at the fair value of this liability, and then in subsequent periods, we accrete this fair value to the estimated future cost of collecting and recycling. Therefore, this is an initial (“one-time”) fair value measurement of the collection and recycling liability associated with each solar module. We do not measure the solar module collection and recycling liability at fair value subsequent to the initial recognition.

Since there is not an established market for collecting and recycling our solar modules, we estimate our liability using a valuation model (an income approach). This fair value measurement requires us to use significant unobservable inputs, which are primarily estimates of collection and recycling process costs and estimates of future changes in costs due to inflation and future currency exchange rates. Accordingly, we classify these valuation techniques for the initial measurement of the estimated liability as Level 3. We estimate collection and recycling process costs based on analysis of the collection and recycling technologies that are currently under development; we estimate future inflation costs based on analysis of historical trends; and we estimate future currency exchange rates based on current rate information. We consider the effect of our own credit standing in our initial measurement of the fair value of this liability.

At September 30, 2012 and December 31, 2011, information about inputs into the fair value measurements of our assets and liabilities that we measure on a recurring basis was as follows (in thousands):

	As of September 30, 2012			
		Fair Value Measurements at Reporting Date Using		
	Total Fair Value and Carrying Value on Our Balance Sheet	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Cash equivalents:				
Commercial paper	$ 1,500	$—	$ 1,500	$ —
Money market mutual funds	10,639	10,639	—	—
Marketable securities:				
Commercial paper	3,394	—	3,394	—
Corporate debt securities	26,962	—	26,962	—
Federal agency debt	24,526	—	24,526	—
Foreign agency debt	5,916	—	5,916	—
Foreign government obligations	5,156	—	5,156	—
Supranational debt	34,335	—	34,335	—
U.S. government obligations	2,006	—	2,006	—
Restricted investments (excluding restricted cash)	285,394	—	285,394	—
Derivative assets	2,842	—	2,842	—
Total assets	$ 402,670	$ 10,639	$ 392,031	$ —
Liabilities:				
Derivative liabilities	$ 14,013	$—	$ 14,013	$ —

	As of December 31, 2011			
		Fair Value Measurements at Reporting Date Using		
	Total Fair Value and Carrying Value on Our Balance Sheet	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Cash equivalents:				
Money market mutual funds	26,378	26,378	—	—
Marketable securities:				
Commercial paper	9,193	—	9,193	—
Corporate debt securities	55,011	—	55,011	—
Federal agency debt	50,081	—	50,081	—
Foreign agency debt	10,928	—	10,928	—
Foreign government obligations	9,120	—	9,120	—

Supranational debt	45,991	—	45,991	—
U.S. government obligations	2,014	—	2,014	—
Restricted investments (excluding restricted cash)	178,815	—	178,815	—
Derivative assets	63,673	—	63,673	—
Total assets	$451,204	$26,378	$424,826	$—
Liabilities:				
Derivative liabilities	$44,412	$—	$44,412	$—

Fair Value of Financial Instruments

29

The carrying values and fair values of our financial and derivative instruments at September 30, 2012 and December 31, 2011 were as follows (in thousands):

	September 30, 2012		December 31, 2011	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Assets:				
Marketable securities — current and noncurrent	$102,295	$102,295	$182,338	$182,338
Foreign exchange forward contract assets	$2,842	$2,842	$63,673	$63,673
Restricted investments (excluding restricted cash)	$285,394	$285,394	$178,815	$178,815
Note receivable, affiliate	$17,408	$17,237	$—	$—
Notes receivable — noncurrent	$9,027	$9,732	$9,086	$9,288
Liabilities:				
Long-term debt, including current maturities	$529,692	$533,106	$663,648	$670,662
Interest rate swap contract liabilities	$1,600	$1,600	$2,571	$2,571
Cross-currency swap contract liabilities	$2,729	$2,729	$4,943	$4,943
Foreign exchange forward contract liabilities	$9,684	$9,684	$36,898	$36,898

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

We estimated the fair value of our long-term debt in accordance with ASC 820 using a discounted cash flows approach (an income approach). 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 12. Economic Development Funding

On February 11, 2011 we were approved to receive taxable investment incentives (“Investitionszuschüsse”) of approximately €6.3 million from the State of Brandenburg, Germany. These funds were expected to reimburse us for certain costs incurred related to the expansion of our manufacturing plants in Frankfurt (Oder), Germany, including costs for the construction of buildings and the purchase of machinery and equipment. Receipt of these incentives was conditional upon the State of Brandenburg having sufficient funds allocated to this program to pay the reimbursements we claim. Based on several factors, including the fiscal budget and credit rating of the State of Brandenburg among others, we believed that there was reasonable assurance that we would receive these grants. In addition, we are required to operate our facility for a minimum of five years and employ a specified number of associates during this period. We expected to meet these conditions at the time such incentives were recorded and as

of December 31, 2011, based on our prior operating plans and commitments. As of December 31, 2011, we had received cash payments of €5.3 million under this program.

We were also eligible to recover up to approximately €17.2 million related to the construction of our plants in Frankfurt (Oder), Germany under the German Investment Grant Act of 2010 (“Investitionszulagen”). This Act permits us to claim tax-exempt reimbursements for certain costs that we incurred related to the expansion of our manufacturing plants in Frankfurt (Oder), Germany, including costs for the construction of buildings and the purchase of machinery and equipment. Tangible assets subsidized under this program have to remain in the region for at least five years. We expected to meet these conditions at the time such incentives were recorded and as of December 31, 2011, based on our operating plans and commitments. As of December 31, 2011, we had

30

received cash payments of €6.0 million under this program.

We accounted for these grants as a reduction to the carrying value of the property, plant and equipment they fund when there was reasonable assurance that we complied and were expected to continue to comply with the conditions attached to the grants and the grants would be received.

Due to the planned closure of our manufacturing plants in Frankfurt (Oder), Germany, we no longer had reasonable assurance we would meet the required conditions to earn such incentives. As a result, in the three months ended March 31, 2012, we recorded an expense of $29.8 million primarily associated with the expected repayment of amounts received and the write-off of outstanding amounts accrued for as receivables under such incentive programs. As of September 30, 2012, we had repaid the entire €5.3 million ($6.8 million at the average rate of $1.28/€1.00) received under the Investitionszuschüsse program and we have recorded €6.0 million ($7.7 million at the balance sheet close rate on September 30, 2012 of $1.29/€1.00) within other current liabilities representing the required repayment of the Investitionszulagen program. See Note 4. “Restructuring,” for additional information on the planned closure of our manufacturing plants in Frankfurt (Oder).

Note 13. 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 are governed by a shareholders agreement. The intent of the shareholders agreement is 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 requires each party to consent to all decisions made for the most significant activities of the property company. There are no requirements for us to make further contributions to the property company and the proceeds from the sale of the project are 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 the property company, which is considered an affiliate, to loan up to €17.0 million ($21.9 million at the balance sheet close rate on September 30, 2012 of $1.29/€1.00), the proceeds of which must be used to purchase the project land and to pay for certain land development costs. The loan bears interest at 6% per annum and must be repaid only after the underlying solar power project has been sold and sufficient proceeds from the sale are received. As of September 30, 2012, the outstanding balance on this loan was €13.5 million ($17.4 million at the balance sheet close rate on September 30, 2012 of $1.29/€1.00). Construction of the project was completed during September 2012 and €3.4 million ($4.4 million at the average rate of 1.28/€1.00) of the loan was repaid as definitive sales agreements were executed for the sale of the project. A portion of the initial sale proceeds, received at the time definitive sales agreements were executed, were used to repay a portion of the loan. Payment of the remaining sales proceeds are subject to certain conditions precedent, which are expected to be met during the fourth quarter of 2012, at which time the outstanding balance under the loan including interest will be repaid.

The property company is considered a variable interest entity and our ownership interest in and the loan to the property company are considered variable interests. We accounted for our investment in the property company under the equity method of accounting as we concluded we are not the primary beneficiary as we do not have the power to make decisions for the most significant activities of the property company. No interest income will be recorded under the loan agreement until such interest income is realized due to the loan being with an affiliate and as payment is not due until sufficient sales proceeds have been received from the sale of the project. There was no income or losses generated by the property company during both the three and nine months ended September 30, 2012 as all costs

incurred by the property company were capital in nature.

Note 14. Debt

Our long-term debt consisted of the following at September 30, 2012 and December 31, 2011 (in thousands):

Type	September 30, 2012	December 31, 2011
Revolving Credit Facility	$ 235,000	$ 200,000
German Facility Agreement	—	140,085
Malaysian Ringgit Facility Agreement	152,001	146,725
Malaysian Euro Facility Agreement	61,951	67,556
Malaysian Facility Agreement	76,677	102,008
Director of Development of the State of Ohio	4,983	6,337
France Facility Agreement	—	4,833
Capital lease obligations	2,099	2,440
Long-term debt principal	532,711	669,984
Less unamortized discount	(3,019)	(6,336)
Total long-term debt	529,692	663,648
Less current portion	(61,398)	(44,505)
Noncurrent portion	$ 468,294	$ 619,143

We did not have any short-term debt at September 30, 2012 and December 31, 2011.

Revolving Credit Facility

On September 4, 2009, we entered into a credit agreement ("Revolving Credit Facility") with several financial institutions as lenders. JPMorgan Securities LLC and Banc of America Securities LLC served as joint-lead arrangers and bookrunners, with JPMorgan Chase Bank, N.A. also acting as administrative agent. The Revolving Credit Facility provided FSI and any designated borrowing subsidiary under the credit facility with a senior secured three-year revolving credit facility in an aggregate available amount of $300.0 million, a portion of which was available for letters of credit.

On October 15, 2010, we entered into an amended and restated Revolving Credit Facility which provides FSI and the borrowing subsidiaries under the credit facility with a senior secured five-year revolving credit facility in an aggregate available amount of $600.0 million, all of which is available for letters of credit. Subject to certain conditions, we have the right to request an increase in the aggregate commitments under the credit facility up to $750.0 million. Proceeds from the credit facility may be used for working capital and other general corporate purposes.

The Revolving Credit Facility consisted of the following at September 30, 2012 (in thousands):

Maturity	Denomination	Capacity	Borrowings Outstanding September 30, 2012	Letters of Credit Outstanding September 30, 2012	Availability September 30, 2012
2015	USD	$600,000	$235,000	$129,958	$235,042

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. As of September 30, 2012, based on the outstanding borrowings, the all-in effective base rate borrowing rate was 3.58%. Borrowings outstanding as of September 30, 2012 were short term in nature and therefore drawn at the 1 month LIBOR rate and prime rate.

The Revolving Credit Facility contains the following financial covenants: 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 September 30, 2012.

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.

In connection with our Revolving Credit Facility, we entered into a guarantee and collateral agreement providing for, among

other things, share pledges of certain restricted subsidiaries under our Revolving Credit Facility.

On May 6, 2011, we entered into the first amendment to the amended and restated Revolving Credit Facility which provided for, among other things, the termination of FSM GmbH as a borrowing subsidiary under the credit agreement and the release of the guarantees of, and the liens securing, its obligations thereunder. The amendment also effected certain changes to the restrictions set forth in the credit agreement with respect to the incurrence of indebtedness to finance the construction or acquisition of new manufacturing facilities and assets relating thereto. In addition, the amendment effected certain technical and clarifying amendments.

On June 30, 2011, we entered into the second amendment and waiver to the amended and restated Revolving Credit Facility. The amendment became effective as of June 30, 2011 upon receipt of approval thereof from the required lenders on July 11, 2011. The amendment provided for, among other things, the ability of restricted subsidiaries to incur indebtedness and guarantee obligations pursuant to letters of credit, bank guarantees, or similar instruments issued in the ordinary course of business; provided that the aggregate stated or face amount of all such letters of credit, bank guarantees, and similar instruments shall not exceed $50.0 million for all restricted subsidiaries outstanding at any time.

On October 23, 2012, we entered into the third amendment and waiver to the amended and restated Revolving Credit Facility. The amendment provided for, among other things, our ability to obtain letters of credit denominated in currencies other than US Dollars, Euro, 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 obligations attributable to letters of credit denominated in such alternative currencies shall not exceed $300.0 million at any time.

German Facility Agreement

On May 18, 2011, in connection with the plant expansion at our German manufacturing center, FSM GmbH, our indirect wholly owned subsidiary, entered into the German Facility Agreement with Commerzbank Aktiengesellschaft as arranger and Commerzbank Aktiengesellschaft, Luxembourg Branch as facility agent and security agent.

In April 2012, we voluntarily repaid the entire outstanding balance under the German Facility Agreement of $141.8 million and we incurred $4.7 million of costs associated with the repayment.

Malaysian Ringgit Facility Agreement

On June 30, 2011, in connection with the plant expansion at our Malaysian manufacturing center, FS Malaysia, our indirect wholly owned subsidiary, 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 Malaysian Ringgit Facility Agreement consisted of the following at September 30, 2012 (in thousands):

Interest Rate	Maturity	Denomination	Original Capacity	Borrowings Outstanding September 30, 2012	Availability September 30, 2012
KLIBOR plus 2.00% (1)	2018	MYR	RM465,000	RM465,000	RM—

(1) We entered into a cross-currency swap contract related to this loan. See Note 10. “Derivative Financial Instruments,” to our condensed consolidated financial statements.

The proceeds of the Malaysian Ringgit Facility Agreement were used by FS Malaysia to finance, in part, the design, construction, and commission of our fifth and sixth manufacturing plants (“Plants 5 and 6”) in Kulim, Malaysia and the acquisition of certain machinery and equipment installed in each plant.

FS Malaysia may voluntarily prepay outstanding loans under the Malaysian Ringgit Facility Agreement at any time without premium or penalty, subject to compensation for customary “break costs” and certain other requirements. FS Malaysia is required to prepay loans with certain insurance proceeds, and the loans are subject to mandatory prepayment upon the occurrence of a change of control, material asset disposal, or termination of the construction of Plants 5 and 6.

The loans made to FS Malaysia are secured by, among other things FS Malaysia’s leases over the leased lots on which Plants

5 and 6 are located and all 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 relating to Plants 5 and 6. In addition, FS Malaysia's obligations under the agreement are guaranteed, on an unsecured basis, by FSI.

At September 30, 2012, buildings, machinery and equipment, and land leases with net book values of $247.5 million were pledged as collateral for this loan.

The Malaysian Ringgit Facility Agreement contains 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 agreement includes financial covenants relating to net total leverage ratio, interest coverage ratio, total debt to equity ratio, debt service coverage ratio, and tangible net worth. It also contains certain representations and warranties, affirmative covenants, and events of default provisions.

On November 8, 2011, we entered into an amendment to the Malaysian Ringgit Facility Agreement which became effective as of September 30, 2011. The amendment replaces and clarifies certain terms and definitions related to the financial covenants included in the agreement.

We were in compliance with all covenants through September 30, 2012.

Malaysian Euro Facility Agreement

On August 3, 2011, in connection with the plant expansion at our Malaysian manufacturing center, FS Malaysia, our indirect wholly owned subsidiary, entered into a credit facility agreement ("Malaysian Euro Facility Agreement") with Commerzbank Aktiengesellschaft and Natixis Zweigniederlassung Deutschland as arrangers and original lenders, and Commerzbank Aktiengesellschaft, Luxembourg Branch as facility agent and security agent.

The Malaysian Euro Facility Agreement consisted of the following at September 30, 2012 (in thousands):

Interest Rate	Maturity	Denomination	Original Capacity		Borrowings Outstanding September 30, 2012	Availability September 30, 2012
EURIBOR plus 1.00%	2018	EUR	€60,000	(1)	€48,042	€—

(1) Three euro-denominated term loan facilities were made available to FS Malaysia in the following maximum aggregate amounts: €27.1 million, €32.0 million, and €0.9 million.

In connection with the Malaysian Euro Facility Agreement, FSI concurrently entered into a first demand guarantee agreement dated August 3, 2011 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. The proceeds of the facilities were used by FS Malaysia to finance, in part, the supply and construction of machinery and equipment installed in Plants 5 and 6 in Kulim, Malaysia and the payment of fees to Euler-Hermes Kreditversicherungs-AG, the German Export Credit Agency of Hamburg, Federal Republic of Germany ("Euler Hermes"), which guarantees 95% of FS Malaysia's obligations related to these credit facilities.

On September 16, 2011, we entered into the first amendment to the Malaysian Euro Facility Agreement. The purpose of the amendment was primarily to clarify funding amounts and conditions including an updated description of the available facilities under the agreement.

FS Malaysia paid the facility agent in the form of a one-time upfront payment for the account of Commerzbank Aktiengesellschaft, as arranger, an arrangement fee of 0.35% and for the account of the lenders a participation fee of 0.65%, in each case of the aggregate amount of the facilities as of the date of the credit agreement.

During the period from the date of the credit agreement until November 25, 2011, unutilized commitments were subject to a commitment fee equal to 0.35% per annum. Pursuant to the agreement, we began making semi-annual repayments of the principal balance during 2011. Amounts repaid under this credit facility cannot be re-borrowed and shall be repaid in 14 semi-annual equal consecutive installments. At any time after the first repayment date, FS Malaysia may voluntarily prepay loans outstanding under

the facilities on the last day of the interest period applicable thereto (subject to certain requirements, including with respect to minimum prepayment amounts). If the Euler Hermes guarantee ceases to be in full force and effect or is repudiated, the facility agent at the direction of the lenders will cancel the available commitments under the facilities and declare the outstanding loans due and payable.

The Malaysian Euro Facility Agreement contains negative covenants that, among other things, restrict, subject to certain exceptions, the ability of FS Malaysia to grant liens over the machinery and equipment financed by the facilities, effect asset sales, provide guarantees, change its business, engage in mergers, consolidations and restructurings, and enter into contracts with FSI and its subsidiaries. In addition, the agreement includes the following financial covenants: maximum total debt to equity ratio, maximum total leverage ratio, minimum interest coverage ratio and minimum debt service coverage ratio. It also contains certain representations and warranties, affirmative covenants, and events of default provisions. We were in compliance with all covenants through September 30, 2012.

Malaysian Facility Agreement

On May 6, 2008, in connection with the plant expansion at our Malaysian manufacturing center, FS Malaysia, our indirect wholly owned subsidiary, entered into an export financing facility agreement ("Malaysian Facility Agreement") with a consortium of banks.

The Malaysian Facility Agreement consisted of the following facilities at September 30, 2012 (in thousands):

Borrowing	Interest Rate	Maturity	Denomination	Original Capacity	Borrowings Outstanding September 30, 2012	Availability September 30, 2012
Fixed-rate facility	4.54%	2016	EUR	€67,000	€29,731	€—
Floating-rate facility	EURIBOR plus 0.55% (1)	2016	EUR	€67,000	€29,731	€—
Total Malaysian Facility Agreement				€134,000	€59,462	€—

(1) We entered into an interest rate swap contract related to this loan. See Note 10. "Derivative Financial Instruments," to our condensed consolidated financial statements.

The proceeds of the Malaysian Facility Agreement were used by FS Malaysia for the purpose of (i) partially financing the purchase of certain machinery and equipment used at our Malaysian manufacturing center, and (ii) financing fees paid to Euler Hermes, which guarantees 95% of FS Malaysia's obligations related to these credit facilities. In addition to paying interest on outstanding principal under the facilities, FS Malaysia is obligated to pay annual agency fees and security agency fees. Pursuant to the agreement, we began semi-annual repayments of the principal balances of these credit facilities during 2008. Amounts repaid under these credit facilities cannot be re-borrowed.

In connection with the Malaysian Facility Agreement, FSI concurrently entered into a first demand guarantee agreement dated May 6, 2008 in favor of the lenders. Thereby FS Malaysia's obligations related to the agreement are guaranteed, on an unsecured basis, by FSI. 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 the 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 September 30, 2012, machinery and equipment with a net book value of $97.0 million was pledged as collateral for these loans.

The Malaysian Facility Agreement contains various financial covenants with which we must comply, including a debt-to-equity ratio, a total leverage ratio, an interest coverage ratio, and a debt service coverage ratio. The agreement also contains various customary non-financial covenants with which FS Malaysia must comply, including submitting various financial reports and business forecasts to the lenders, maintaining adequate insurance, complying with applicable laws and regulations, and restrictions on FS Malaysia’s ability to sell or encumber assets, or make loan guarantees to third parties. We were in compliance with all covenants through September 30, 2012.

Director of Development of the State of Ohio

During the year ended December 31, 2005, we received a loan from the Director of Development of the State of Ohio which consisted of the following at September 30, 2012 (in thousands):

Interest Rate	Maturity	Denomination	Original Capacity	Borrowings Outstanding September 30, 2012	Availability September 30, 2012
2.25%	2015	USD	$15,000	$4,983	$—

At September 30, 2012, land and buildings with net book values of $18.5 million were pledged as collateral for this loan.

Variable Interest Rate Risk

Certain of our debt-financing 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.

Note 15. 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 of our 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 meet the definition of a guarantee according to ASC 460, Guarantees. As of September 30, 2012 and December 31, 2011, none of these guarantees were material to our consolidated financial position.

Loan Guarantees

At September 30, 2012 and December 31, 2011, our only loan guarantees were guarantees of our own debt, as disclosed in Note 14. "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 September 30, 2012, we had $130.0 million in letters of credit issued under the Revolving Credit Facility with a remaining availability of $235.0 million, all of which can be used for the issuance of letters of credit. The majority of these letters of credit were supporting our systems business. As of September 30, 2012, we had $42.2 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.

In addition, as of September 30, 2012 we had $37.7 million in surety bonds outstanding primarily for our systems 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. We make and revise this estimate 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 BoS components, and our estimated per-module 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 statement of operations if we commit to any such remediation actions.

Product warranty activities during the three and nine months ended September 30, 2012 and September 30, 2011 were as follows (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2012	September 30, 2011	September 30, 2012	September 30, 2011
Product warranty liability, beginning of period	$181,889	$ 36,356	$157,742	$27,894
Accruals for new warranties issued	14,354	6,627	25,967	17,189
Settlements	(24,152)	(5,373)	(40,749)	(11,828)
Change in estimate of product warranty liability (1)	5,123	4,895	34,254	9,250
Product warranty liability, end of period	$177,214	$ 42,505	$177,214	$42,505
Current portion of warranty liability	$82,795	$ 12,437	$82,795	$12,437
Noncurrent portion of warranty liability	$94,419	$ 30,068	$94,419	$30,068

(1) Changes in estimate of product warranty liability during the nine months ended September 30, 2012 include a net increase to our best estimate of $22.6 million in the first quarter of 2012 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 and June 2009. Such estimated increase was primarily due to the completion of the analysis on certain outstanding claims as of December 31, 2011. The remaining portion of this increase was primarily related to a change in estimate in the first quarter of 2012 for the market value of the modules that we estimate will be returned to us under the voluntary remediation efforts that meet the required performance standards to be re-sold as refurbished modules. If the actual market value for such refurbished modules is less than the estimated market value for such modules we may be required to incur additional expense for further write-downs.

Systems Repurchases

Under the sales agreements for a limited number of our solar power projects, we may be required to repurchase such projects if certain events occur, such as not achieving commercial operation of the project within a certain timeframe.

Although we consider the possibility that we would be required to repurchase any of our solar power projects to be remote, our current working capital and other available sources of liquidity may not be sufficient in order to make any required repurchase. If we are required to repurchase a solar power project we would have the ability to market and sell such project at then current market pricing, if the event requiring a repurchase does not impact its marketability. Our liquidity may also be impacted as the time between the repurchase of a project and the potential sale of such repurchased project could take several months.

For the sales agreements that have such conditional repurchase clauses, in accordance with ASC 360, we will not recognize revenue on such sales agreements until the conditional repurchase 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. The Court has not yet ruled on that motion.

The action is 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.

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. The Court has not yet ruled on that motion.

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. The Court has not yet ruled on that motion

First Solar believes that plaintiffs in the derivative actions lack standing to pursue litigation on behalf of First Solar.

The 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 16. 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 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 nine months ended September 30, 2012 and September 30, 2011 was as follows (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2012	September 30, 2011	September 30, 2012	September 30, 2011
Share-based compensation expense included in:				
Cost of sales	$6,941	$9,653	$17,536	$26,098
Research and development	734	3,884	4,869	11,184
Selling, general and administrative	5,460	14,342	(2,663)	45,736
Production start-up	525	808	356	2,507
Restructuring	376	—	871	—
Total share-based compensation expense	$14,036	$28,687	$20,969	$85,525

We increased our estimated forfeiture rate in the second and third quarters of 2012, which was recorded as a cumulative adjustment in accordance with ASC 718. The increased forfeiture rate was primarily due to our restructuring activities discussed in Note 4. “Restructuring,” which caused us to experience an increase in actual forfeitures during the second and third quarters of 2012 compared to historical experience prior to such restructuring activities. As of September 30, 2012, our current forfeiture rate estimate includes an expectation that the recent forfeiture experience will continue over the remaining term of our outstanding share-based compensation 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.

The following table presents our share-based compensation expense by type of award for the three and nine months ended September 30, 2012 and September 30, 2011 (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2012	September 30, 2011	September 30, 2012	September 30, 2011
Stock options	$9	$59	$273	$819
Restricted stock units	12,256	28,444	21,214	85,357
Unrestricted stock	234	225	595	677
Stock purchase plan	209	—	580	—
Net amount absorbed into inventory	1,328	(41)	(1,693)	(1,328)
Total share-based compensation expense	$14,036	$28,687	$20,969	$85,525

Share-based compensation cost capitalized in our inventory was $5.0 million and $3.3 million at September 30, 2012 and December 31, 2011, respectively. As of September 30, 2012, we had no unrecognized share-based compensation cost related to unvested stock option awards, and $129.7 million of unrecognized share-based compensation cost related to unvested restricted stock units, which we expect to recognize as an expense over a weighted-average period of approximately 2.4 years.

Note 17. Income Taxes

Our effective tax rates were 20.6% and (19.1)% for the three and nine months ended September 30, 2012, respectively, and were 11.8% and 12.7% for the three and nine months ended September 30, 2011, respectively. Our effective tax rate was lower during the nine months ended September 30, 2012 compared with the nine months ended September 30, 2011 primarily due to the reduction in pre-tax profits during such periods, offset by an increase in tax expense related to the establishment of a valuation allowance of $12.3 million against previously established deferred tax assets, a greater percentage of profits earned in higher tax jurisdictions, and losses being generated in jurisdictions for which no tax benefit is being 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.

At each period end, we exercise judgment in determining our provisions for income taxes, our deferred tax assets and liabilities and our future taxable income for purposes of assessing our likelihood of utilizing any future tax benefit from our deferred tax assets. The ultimate realization of deferred tax assets depends on the generation of sufficient taxable income of the appropriate character and in the appropriate taxing jurisdictions during the future periods in which the underlying tax-deductible temporary differences become deductible. We determine any necessary valuation

allowances on our deferred tax assets in accordance with the provisions of ASC 740, Accounting for Income Taxes, which require us to weigh both positive and negative evidence in order to ascertain whether it is more-likely-than-not that deferred tax assets will be realized.

After applying the evaluation guidance of ASC 740 as of March 31, 2012, we concluded that as a result of our restructuring activities it was not more-likely-than-not that $12.3 million of previously established non-U.S. net deferred tax assets related to our European operations would be realized during future periods. The recording of valuation allowances was based upon management’s assessment of the available evidence at March 31, 2012 and was primarily based upon the planned closure of most European operations due to reduced expected future market demand and the lack of legislative support for utility-scale solar projects in Europe. In addition, as a result of the establishment of such valuation allowances, no tax benefits are being recognized in relation to 2012 for any expected operating losses from European operations in 2012. See Note 4. “Restructuring,” for additional

information on the planned closure of most European operations.

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.

Note 18. Net Income 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 stock units, stock purchase plan shares, and contingently issuable shares, unless there is a net loss per share for the period.

The calculation of basic and diluted net income (loss) per share for the three and nine months ended September 30, 2012 and September 30, 2011 was as follows (in thousands, except per share amounts):

	Three Months Ended		Nine Months Ended	
	September 30, 2012	September 30, 2011	September 30, 2012	September 30, 2011
Basic net income (loss) per share				
Numerator:				
Net income (loss)	$87,917	$ 196,514	$(250,516)	$ 373,620
Denominator:				
Weighted-average common stock outstanding	86,992	86,338	86,785	85,946
Diluted net income (loss) per share				
Denominator:				
Weighted-average common stock outstanding	86,992	86,338	86,785	85,946
Effect of stock options, restricted stock units, stock purchase plan shares, and contingent issuable shares	773	813	—	1,168
Weighted-average shares used in computing diluted net income (loss) per share	87,765	87,151	86,785	87,114

	Three Months Ended		Nine Months Ended	
	September 30, 2012	September 30, 2011	September 30, 2012	September 30, 2011
Per share information — basic:				
Net income (loss) per share	$1.01	$ 2.28	$(2.89)	$ 4.35
Per share information — diluted:				
Net income (loss) per share	$1.00	$ 2.25	$(2.89)	$ 4.29

The following number of outstanding employee stock options, restricted stock units and stock purchase plan shares were excluded from the computation of diluted net income (loss) per share for the three and nine months ended September 30, 2012 and September 30, 2011 as they would have had an anti-dilutive effect (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2012	September 30, 2011	September 30, 2012	September 30, 2011
Restricted stock units, stock purchase plan, and options to purchase common stock	1,071	315	1,907	448

Note 19. Comprehensive Income

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

40

---

as follows for the three and nine months ended September 30, 2012 and September 30, 2011 (in thousands):

	Three Months Ended	
	September 30, 2012	September 30, 2011
Net income	$87,917	$ 196,514
Other comprehensive income (loss), net of tax:		
Foreign currency translation adjustments	2,600	(25,419)
Unrealized gain on marketable securities and restricted investments for the period (net of tax of $(525) and $(5,422), respectively)	11,009	30,417
Less: reclassification for (gains) included in net income (net of tax of $0 and $2, respectively)	—	(46)
Unrealized gain on marketable securities and restricted investments	11,009	30,371
Unrealized (loss) gain on derivative instruments for the period (net of tax of $1,813 and $(5,059) respectively)	(1,922)	48,878
Less: reclassification for (gains) losses included in net income (net of tax of $0 and $0, respectively)	(7,957)	6,492
Unrealized (loss) gain on derivative instruments	(9,879)	55,370
Other comprehensive income, net of tax	3,730	60,322
Comprehensive income	$91,647	$ 256,836

	Nine Months Ended	
	September 30, 2012	September 30, 2011
Net (loss) income	$(250,516)	$373,620
Other comprehensive (loss) income, net of tax:		
Foreign currency translation adjustments	6,314	5,170
Unrealized gain on marketable securities and restricted investments for the period (net of tax of $(1,296) and $(4,145), respectively)	19,587	21,428
Less: reclassification for (gains) included in net income (net of tax of $0 and $816, respectively)	(16)	(2,531)
Unrealized gain on marketable securities and restricted investments	19,571	18,897
Unrealized (loss) on derivative instruments for the period (net of tax of $2,917 and $(7,556), respectively)	(9,225)	(21,579)
Less: reclassification for (gains) losses included in net income (net of tax of $1,774 and $0, respectively)	(13,369)	45,430
Unrealized (loss) gain on derivative instruments	(22,594)	23,851
Other comprehensive income, net of tax	3,291	47,918
Comprehensive (loss) income	$(247,225)	$421,538

Components of accumulated other comprehensive income (loss) at September 30, 2012 and December 31, 2011 were as follows (in thousands):

	September 30, 2012	December 31, 2011
Foreign currency translation adjustments	$ (42,066)	$ (48,381)
Unrealized gain on marketable securities and restricted investments, net of tax of $(6,035) and $(4,740) as of September 30, 2012 and December 31, 2011, respectively	44,002	24,431
Unrealized (loss) gain on derivative instruments, net of tax of $(1,677) and $(6,368) as of September 30, 2012 and December 31, 2011, respectively	(3,681)	18,913
Accumulated other comprehensive (loss)	$ (1,745)	$ (5,037)

Note 20. Statement of Cash Flows

The following table presents a reconciliation of net (loss) income to net cash provided by (used in) operating activities for the nine months ended September 30, 2012 and September 30, 2011 (in thousands):

	Nine Months Ended	
	September 30, 2012	September 30, 2011
Net (loss) income	$(250,516)	$ 373,620
Adjustments to reconcile net (loss) income to net cash provided by (used in) operating activities:		
Depreciation and amortization	202,131	166,527
Impairment of long-lived assets	355,029	2,575
Impairment of project assets	3,217	6,881
Share-based compensation	20,969	85,525
Remeasurement of monetary assets and liabilities	6,967	14,749
Deferred income taxes	11,174	(85,821)
Excess tax benefit from share-based compensation arrangements	(61,571)	(79,741)
Provision for doubtful accounts receivable	2,950	10,535
Gain on sales of marketable securities, and restricted investments, net	(16)	(3,347)
Other operating activities	(4,757)	(687)
Changes in operating assets and liabilities:		
Accounts receivable, trade and unbilled	(252,574)	(520,178)
Prepaid expenses and other current assets	84,844	(167,001)
Other assets	85,083	(100,269)
Inventories and balance of systems parts	(285,628)	(280,762)
Project assets and deferred project costs	(76,775)	62,073
Accounts payable	70,401	80,824
Income taxes payable	51,382	96,195
Accrued expenses and other liabilities	426,123	242,339
Accrued solar module collection and recycling liability	46,217	51,766
Total adjustments	685,166	(417,817)
Net cash provided by (used in) operating activities	$434,650	$ (44,197)

Note 21. Segment Reporting

ASC 280, Segment Reporting, establishes standards for companies to report in their financial statements information about operating segments, products, services, geographic areas, and major customers. The method of determining what information to report is generally based on the way that management organizes the operating segments within the Company for making operating decisions and assessing financial performance.

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 operators of renewable energy projects.

Our second segment is our fully integrated systems business (“systems segment”), through which we provide a complete PV solar power system, which includes project development, EPC products, operating and maintenance services, when applicable, and project finance, when required. We may provide our full EPC product or any combination of individual products within our EPC capabilities. 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.

Our Chief Operating Decision Maker (“CODM”), consisting of certain members of senior executive staff, views both our ability to provide customers with a complete PV solar power system through the systems segment and the manufacturing of solar modules from the components segment as the drivers of our resource allocation, profitability, and cash flows. The complete PV solar power systems sold through our systems segment drive resource allocation, profitability, and cash flows through delivering state of the art construction techniques and process management to reduce the installed cost of our PV systems, and accordingly, the systems segment is considered by our CODM as a direct contributor to our profitability. Therefore, our CODM views both

our components and systems segments as contributors to our operating results.

Prior to June 30, 2012, our CODM viewed the systems segment as an enabler to drive module throughput from our components segment, with a primary objective to achieve break-even results before income taxes. During the three months ended June 30, 2012, we finalized and announced the details related to our Long Term Strategic Plan, which is primarily focused on providing complete utility scale PV solar power solutions, which use our modules, to sustainable markets. Additionally, James Hughes was appointed as Chief Executive Officer during such quarter. These factors led to a change in how our CODM views and measures the profitability of our operating segments, which therefore changed the information reviewed by our CODM to allocate resources and evaluate profitability of such segments.

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.

After we have determined the amount of revenue earned for our systems projects following the applicable accounting guidance for the underlying sales arrangements, we allocate module revenue from the systems segment to the components segment based on how our CODM strategically views these segments. The amount of module revenue allocated from the systems segment to the components segment is equal to an estimated average selling price for such solar modules as if the modules were sold to a third party EPC customer through a long term supply agreement that establishes pricing at the beginning of each year. In order to develop the estimate of the average selling price used for this revenue allocation, we utilize a combination of our actual third party module sale transactions, our competitor benchmarking and our internal pricing lists used to provide module price quotes to customers. This allocation methodology and the estimated average selling prices are consistent with how our CODM views the value proposition our components business brings to a utility scale systems project and the financial information reviewed by our CODM in assessing our components business performance.

Our components and systems segments have certain of their 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 the respective selling, general and administrative costs for our components and systems segments. Our corporate key functions consist primarily of company-wide corporate tax, corporate treasury, corporate accounting/finance, corporate legal, investor relations, corporate communications, 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. Infrequent and other miscellaneous costs including restructuring and manufacturing excursions, are included in the components or systems segment operating results based upon which segment incurred the underlying costs.

Prior period segment information has been restated to conform to the September 30, 2012 presentation. None of the changes in the measure of our operating segments profitability impact the determination of our reportable operating segments or our previously reported consolidated financial results.

Financial information about our operating segments during the three and nine months ended September 30, 2012 and September 30, 2011 was as follows (in thousands):

	Three Months Ended September 30, 2012			Three Months Ended September 30, 2011		
	Components	Systems	Total	Components	Systems	Total
Net sales	$281,900	$557,247	$839,147	$545,620	$460,168	$1,005,788
Gross profit	$22,547	$216,169	$238,716	$186,599	$192,565	$379,164
(Loss) income before income taxes	$(62,949)	$173,710	$110,761	$87,258	$135,507	$222,765
Goodwill	$—	$65,444	$65,444	$393,365	$65,443	$458,808
Total assets	$3,670,783	$2,310,946	$5,981,729	$4,383,887	$1,379,425	$5,763,312

	Nine Months Ended September 30, 2012			Nine Months Ended September 30, 2011		
	Components	Systems	Total	Components	Systems	Total
Net sales	$737,711	$1,555,823	$2,293,534	$1,569,298	$536,557	$2,105,855
Gross profit	$(10,264)	$569,466	$559,202	$666,945	$166,682	$833,627
(Loss) income before income taxes	$(669,320)	$458,942	$(210,378)	$391,703	$36,026	$427,729
Goodwill	$—	$65,444	$65,444	$393,365	$65,443	$458,808
Total assets	$3,670,783	$2,310,946	$5,981,729	$4,383,887	$1,379,425	$5,763,312

Product Revenue

The following table sets forth the total amounts of solar modules and solar power systems revenue recognized for the three and nine months ended September 30, 2012 and September 30, 2011. 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.

(Dollars in thousands)	Three Months Ended September 30, 2012	Three Months Ended September 30, 2011	Nine Months Ended September 30, 2012	Nine Months Ended September 30, 2011
Solar module revenue	$59,703	$ 351,728	$181,710	$ 1,284,820
Solar power system revenue	779,444	654,060	2,111,824	821,035
Net sales	$839,147	$ 1,005,788	$2,293,534	$ 2,105,855

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, and capital expenditures; our ability to continue to reduce the cost per watt of our solar modules; 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,” “believe,” “forecast,” “foresee,” “likely,” “may,” “should,” “goal,” “target,” “might,” “will,” “could,” “predic negative or plural of 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, 2011 and elsewhere in this Quarterly Report on Form 10-Q and in our Annual Report on Form 10-K 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,” and “First Solar” refer to First Solar, Inc. and its subsidiaries.

Executive Overview

We manufacture and sell solar modules with an advanced thin-film semiconductor technology, and we design, construct, and sell photovoltaic (“PV”) solar power systems that use the solar modules we manufacture.

In addressing overall global demand for PV solar electricity, we have developed a differentiated, fully integrated systems business that can provide a low-cost turn-key utility-scale PV system solution for system owners and low cost electricity to utility end-users. Our fully integrated systems business, which exclusively 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 continue to expand our business in economically sustainable markets (in which support programs are minimal), which are developing in areas with abundant solar resources 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 the lowest cost of solar electricity, we are continually focused on reducing PV solar system costs in four primary areas: module manufacturing, balance of systems (“BoS”) costs (consisting of the costs of the components of a solar power system other than the solar modules, such as inverters, mounting hardware, grid interconnection equipment, wiring and other devices, and installation labor costs), project development costs, and the cost of capital. 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 September 30, 2012, our total average manufacturing costs were $0.70 per watt, which is competitive with those of traditional crystalline silicon solar module manufacturers, based on publicly available information. By continuing to improve conversion efficiency, production line throughput, and lower 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 BoS costs, by continuing to improve conversion efficiency, leverage volume procurement around standardized hardware platforms, and accelerate installation times, we believe we can continue to make reductions in BoS costs, which represent over half of all of the costs associated with a typical utility-scale PV solar power system. 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. Finally, with respect to our cost of capital, by continuing to demonstrate the financial viability and operational performance of our utility-scale PV solar power plants 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.

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, identify and remove constraints on the successful migration to sustainable solar markets around the world, and further our mission to create enduring value by enabling a world powered by clean, affordable solar electricity.

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 operators of renewable energy projects.

Our second segment is our fully integrated systems business (“systems segment”), through which we provide a complete PV solar power system, which includes project development, engineering, procurement and construction (“EPC”) products, operating and maintenance (“O&M”) services, when applicable, and project finance, when required. We may provide our full EPC product or any combination of individual products within our EPC capabilities. All of our systems segment products and services are for

45

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.

See Note 21. "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 environment, categorized by intense pricing competition, bankruptcies of several solar companies (particularly module manufacturers) and many solar companies generating little or 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 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 2012. 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 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 are executing 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.

The development of solar markets outside of the European Union continued throughout 2012, in part aided by demand elasticity resulting from declining industry average selling prices, which make solar power more affordable to new markets, and we have continued to develop our localized presence and expertise in these markets. In the United Arab Emirates, we announced in October 2012 that we were selected by the Dubai Electricity & Water Authority ("DEWA") to construct a 13 MW DC PV power plant near Dubai. In India, we announced in October 2012 the entry into an agreement to supply First Solar modules to two PV power plants totaling 50 MW DC to be constructed in India's Rajasthan state. In Australia, First Solar, Verve Energy and GE Energy Financial Services officially opened in October a First Solar built 10 MW AC plant that will help power the Southern Seawater Desalination Plant in Western Australia. In China, we announced in September 2012 the appointment of a country head to lead business development in China, with responsibility for expanding the market for utility-scale solar PV power plants in that country. In Thailand, we announced in August 2012 the establishment of a Thai operating subsidiary and the opening of an office in Bangkok to enable First Solar to execute its strategy and pursue opportunities for utility scale PV power plants in the local market.

In North America, we continue to execute on our utility-scale systems pipeline. We continue to make construction progress on what will be among the world's four largest solar PV power plants: the 550 MW AC Desert Sunlight Solar Farm, located west of Blythe, California; the 550 MW AC Topaz Solar Farm, located in San Luis Obispo County, California; the 290 MW AC Agua Caliente project in Yuma County, Arizona; and the 230 MW AC Antelope Valley Solar Ranch One project ("AVSR1"), located just north of Los Angeles, California. The Agua Caliente project is currently the largest operating PV power plant 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 four projects. We continue to advance the development and selling efforts for the other projects included in our pipeline and we continue to evaluate additions to our advanced-stage project pipeline. In September 2012, we announced execution of power purchase agreements with Pacific Gas and Electric Company ("PG&E") for 72 MW AC of solar electricity to be generated at two PV power plants that First Solar is developing in central California, namely the 32 MW AC Lost Hills project in Kern

County and the 40 MW AC Cuyama project in Santa Barbara County. In September 2012, we also announced the entry into agreements to construct four solar power plants totaling 20 MW AC in New Mexico for PNM Resources, Inc.

The major European governments continue to seek to balance subsidy costs with their commitment to the European Union directive's goal of a 20% share of energy from renewable sources in the European Union by 2020. These governments continue to adopt or evaluate changes to their feed-in-tariff ("FiT") structures, market caps, and/or tender processes. In many instances, such revised or proposed FiT structures would particularly impact the competitiveness of our core offering of large-scale free field PV systems and modules to be installed in such systems. For instance, the German Parliament approved in 2012 significant and accelerated FiT reductions for projects up to 10 MW and an elimination of FiTs for projects over 10 MW, unless a special ministry decree applies FiTs to such projects under certain conditions. The resulting market uncertainties, together with increased European financing environment constraints, have contributed to demand pauses and increased customer difficulties, which, in conjunction with increased industry-wide manufacturing capacity, have contributed to excess industry channel inventories. In the first nine months of 2012, industry average module pricing continued to decline as competitors reduced prices to sell-through inventories in Europe and elsewhere in light of these factors. 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, namely its affordability. In the near term, however, in light of continually declining FiT structures in the European markets and increased industry-wide manufacturing capacity, it is uncertain whether growing demand from other countries and markets can 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 manufacturing costs, or are able to operate at minimal or negative 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 utility-scale systems pipeline as a buffer against demand fluctuations, accelerating our thin-film module efficiency improvements and cost reduction roadmaps to maintain and increase our competitiveness, profitability and capital efficiency, adjusting our production plans and capacity utilization to match expected demand, and continuing the development of worldwide geographic markets, including those in India, Australia, the Middle East, South America, and China.

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 module cost per watt, and, with respect to solar power systems, return on equity (“ROE”) and levelized cost of electricity (“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 systems and enables our 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 semiconductor material (i.e., silicon) 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 declined significantly over the past year and continue to decline contributing to a decline in our manufacturing cost competitiveness over crystalline silicon module manufacturers. Although we are not a crystalline silicon module manufacturer, we estimate, based on industry research and public disclosures of our competitors, that a $10 per Kg increase or decrease in the price of polysilicon could increase or decrease, respectively, our competitors’ manufacturing cost per watt by approximately $0.05 to $0.08 over time. Given the lower conversion efficiency of our modules compared to 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. We continue to reduce BoS costs associated with systems using our modules. While our modules currently enjoy competitive advantages in these product performance attributes, there can be no guarantee that these advantages 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, decreases in the rate of revenue growth, and/or declines in overall revenues. 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 and BoS cost reduction roadmaps, and focusing our research and development on increasing the conversion efficiency of our solar modules.

As we expand our systems business into sustainable markets, we can offer value beyond the solar module, reduce our exposure to module-only competition, provide differentiated offerings to minimize the impact of solar module commoditization, and provide comprehensive utility-scale PV systems 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 partner relationships with our customers around the world and continue to develop our range of offerings, including EPC capabilities and O&M services, in order to enhance the competitiveness of systems using our solar modules.

Certain Trends and Uncertainties

We believe that our continuing operations may be favorably or unfavorably impacted by the following trends 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 29, 2012 ("Form 10-K Risk Factors") and elsewhere in this report for a discussion of other risks that may affect our financial condition and results of operations.

Long Term Strategic Plan

In May 2012, we provided information regarding our long term strategic plan ("Long Term Strategic Plan" or "LTSP") to transition 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 new markets throughout the Americas, Asia, the Middle East, and Africa. As part of our LTSP, we expect to focus on opportunities in which our solar PV generation solutions will compete directly with fossil fuel offerings on a levelized cost of energy basis. Execution of the LTSP will entail 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 will evaluate and manage closely the appropriate level of resources required as we transition into and penetrate these specific markets. We intend 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 the specific region.

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 Long Term Strategic Plan, and that, over time, larger relative contributions to our overall financial performance may come from systems offerings in comparison to module only sales. The timing, execution and financial impacts of our Long Term Strategic Plan are subject to risks and uncertainties, as described in the Form 10-K Risk Factors.

We are focusing our resources in those markets in which solar 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 will be expanding resources globally, including by appointing country heads and supporting professional, sales and other staff in target markets. Accordingly we expect to shift current costs and 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 strategy, and we have begun initiatives in several markets to expedite our penetration of those markets and establish relationships with potential customers and policymakers. Some of these business arrangements may involve 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 solar. We intend to sell solar solutions that include our modules directly to end customers, including independent power producers, utilities, retail electric providers and commercial and industrial customers. Depending on the market opportunity, our sales offerings range from third party module sales only, to module sales with a range of engineering, procurement and construction products, to full-scale system sales. We expect these sales offerings to continue to evolve over time as we work with our customers to optimize how our PV solutions can best meet our customers' energy and economic needs.

We expect the profitability associated with our various sales offerings to vary from one another over time, depending on the market opportunity and the relative competitiveness of our offering compared with the other energy solutions, fossil fuel based or otherwise, that are available to our customers.

Construction of Some of the World's Largest Solar PV Power Plants

We expect a substantial portion of our consolidated net sales, operating income and cash flows through 2015 to be derived from the following four projects in North America, which will be among the world's four largest solar PV power plants: the 550 MW AC Desert Sunlight Solar Farm, located west of Blythe, California; the 550 MW AC Topaz Solar Farm, located in San Luis Obispo County, California; the 290 MW AC Agua Caliente project located in Yuma County, Arizona; and the 230 MW AC AVSR1 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 Business" for additional information about these and other projects within our utility systems advanced project pipeline. Construction progress of these projects is subject to risks and delays as described in the Form 10-K Risk Factors. Revenue recognition for these projects is 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. As we progress towards substantial completion of our four largest PV power plants under construction, which is expected to occur in or prior to 2015, 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 Long Term Strategic Plan described above.

Manufacturing Capacity

As of September 30, 2012, we had 36 installed production lines with an annual global manufacturing capacity of approximately 2.4 GW at our manufacturing plants in Perrysburg, Ohio, Frankfurt (Oder), Germany, and Kulim, Malaysia. In April 2012, executive management approved a set of restructuring initiatives intended to reduce costs and align the Company’s organization with its

Long Term Strategic Plan including expected sustainable market opportunities. As part of these initiatives, we will substantially reduce our European operations including the closure of our manufacturing operations in Frankfurt (Oder), Germany by the end of 2012, reducing the number of installed production lines in operation by eight. Production at the 24 production lines in Malaysia and the four production lines in Ohio may be idled temporarily to allow the Company to implement upgraded process technologies as part of our accelerated conversion efficiency improvement initiatives, and to better align production with expected market demand. The Company expects to produce approximately 1.9 GW of solar modules in 2012.

Restructuring

We have undertaken a series of restructuring initiatives as further described below as part of our efforts to align our business resources with our Long Term Strategic Plan. Expenses recognized for the restructuring activities are presented in “Restructuring” on our condensed consolidated statements of operations.
December 2011 Restructuring

In December 2011, executive management approved a set of restructuring initiatives intended to accelerate operating cost reductions and improve overall operating efficiency. In connection with these restructuring initiatives, we incurred total charges to operating expense of $60.4 million in the fourth quarter of 2011 and $0.3 million in the first nine months of 2012. These charges consisted of (i) $52.4 million of asset impairment and asset impairment related charges due to a significant reduction in certain research and development activities that had been focused on an alternative PV product, and (ii) $8.3 million in severance benefits to terminated employees as described below, most of which is expected to be paid out by the end of 2012.

We have refocused our research and development center in Santa Clara, California on the development of advanced cadmium telluride PV technologies, compared to a broader research and development effort prior to December 2011. We eliminated approximately 100 positions company-wide as part of the restructuring initiatives. The related long-lived assets were considered abandoned for accounting purposes and were impaired to their estimated salvage value as of December 31, 2011.

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. In connection with these initiatives, we incurred total charges to operating expense of $131.6 million during the nine months ended September 30, 2012. These charges consisted of (i) $99.3 million of asset impairment and asset impairment related charges due to our decision not to proceed with our 4-line manufacturing plant in Vietnam, (ii) $25.3 million of asset impairment and asset impairment related charges due to our decision to cease use of certain manufacturing machinery and equipment intended for use in the production of certain components of our solar modules, and (iii) $7.0 million of asset impairment and asset impairment related charges primarily due to our decision to cease use of certain other long-lived assets.

Based upon expected future market demand and our focus on providing utility-scale PV generation solutions primarily to sustainable geographic markets, we decided not to proceed with our previously announced 4-line plant in Vietnam. As of March 31, 2012, the plant was considered “held for sale”, and a corresponding impairment charge of $92.2 million was recorded. Additionally, certain manufacturing machinery and equipment intended for use in the production of certain components of our solar modules and certain other long-lived assets were considered abandoned for accounting purposes in February 2012. As a result, we recorded an impairment charge in the nine months ended

September 30, 2012 of $29.2 million.

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 will substantially reduce our European operations including the closure of our manufacturing operations in Frankfurt (Oder), Germany by the end of 2012. Due to the lack of policy support for utility-scale solar projects in Europe, we do not believe there is a business case for continuing manufacturing operations in Germany. Additionally, we have substantially reduced the size of our operations in Mainz, Germany and elsewhere in Europe. We also temporarily idled the capacity of four production lines at our manufacturing center in Kulim, Malaysia in May 2012. We have commenced these actions and additional reductions in administrative and other staff in North America, which will lead to a reduction in First Solar's workforce of approximately 2,000 associates, once completed. After such actions are completed First Solar's manufacturing operations will consist of 24 production lines in Kulim, Malaysia and four production lines in Perrysburg, Ohio, with a global workforce of approximately 6,000 associates.

The restructuring and related initiatives resulted in total charges of $312.3 million in the nine months ended September 30, 2012, including: (i) $231.0 million in asset impairments and asset impairment related charges, primarily related to the Frankfurt (Oder) plants; (ii) $50.9 million in severance and termination related costs; and (iii) $30.4 million for the required repayment of German government grants related to the second Frankfurt (Oder) plant.

We expect to incur between $20 million and $40 million in additional restructuring expense through the first half of 2013 primarily related to remaining severance and termination related costs and asset impairment related costs associated with such restructuring initiatives.

The cost savings expected from these restructuring initiatives in 2012 are expected to be between $30 million to $50 million, substantially all reducing selling, general and administrative expenses. Annual cost savings in 2013 and beyond are expected to be between $100 million and $120 million, reducing both cost of sales and selling, general and administrative expenses in approximately equal amounts. These cost savings may be offset by increases in operating expenses primarily related to establishing a localized business presence in target markets pursuant to our Long Term Strategic Plan.

System Level Module Performance Warranty

As an alternative to our module power output warranty, we have offered a system level module performance warranty for a limited number of our recent system sales. This system level module performance warranty is designed for utility scale systems and provides a 25-year plant-level energy degradation protection. The system level module performance warranty is calculated as a percentage of a systems expected energy production, adjusted for certain actual site conditions, with the warranted level of performance declining each year in a linear fashion, but never falling below 80% during the term of the warranty. In resolving claims under the system level module performance warranty to restore the system to warranted performance levels, we first must validate that the root cause is due to module performance, then we typically have the option of either repairing or replacing modules, providing supplemental modules or making a cash payment. Consistent with our module power output warranty, when we elect to satisfy a valid warranty claim by providing replacement or supplemental modules under the systems level module performance warranty, we do not have any labor obligation to remove or install modules.

Currently, only a small percentage of our systems projects are subject to such system level module performance warranty, but we expect that this percentage will increase in the future as we extend it to future systems sales arrangements. We do not anticipate that the system level module performance warranty will have a material impact on our future warranty claim rates, as such warranty is designed to be in line with the expected risk-adjusted aggregate performance of our modules. The offering of such system level warranty addresses the challenge of identifying, from the potential millions of modules installed in a utility scale system, individual modules that are performing below warranty by focusing on the energy generated by the system rather than the capacity of individual modules.

Financial Operations Overview

The following describes certain line items in our statement 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 power. During the three and nine months ended September 30, 2012, the substantial majority of net sales from the components business was related to modules included in our solar systems described below under "Net Sales — Systems Business." Other than the modules included in our solar power systems, we sold the majority of our solar modules to solar power system project developers, system integrators, and operators headquartered in the United States, Germany, and India, which either resell our solar modules to end-users or integrate them into power plants that they own, operate, or sell.

During 2012, we have had supply contracts for the sale of solar modules with certain solar power system project developers and system integrators headquartered within the European Union ("Supply Contracts"), most of which have been terminated upon mutual consent or will expire by the end of 2012. The remaining volumes we expect to sell under our ongoing Supply Contracts are not expected to be a significant portion of our consolidated net sales. We have also entered into module sales agreements with customers worldwide for specific projects or volumes of modules through the remainder of 2012 and thereafter. During the three and nine months ended September 30, 2012, 3.6% and 40.6% respectively of our components business net sales, excluding modules

included in our 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 nine months ended September 30, 2011, 80% and 79%, respectively of our components business net sales, excluding modules included in our 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. Our customers do not typically have extended payment terms and do not have rights of return under these contracts.

Systems Business

Through our fully integrated systems business, we provide a complete solar power system solution using our solar modules, which may include project development, EPC products, O&M services, when applicable, and project finance, when required.

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

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 using actual costs incurred over total estimated costs to 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. We periodically revise our contract cost, revenue, and profit estimates and we immediately recognize any losses that we identify on such contracts. 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 attached or fitted to the solar power systems as required by engineering designs. Solar modules 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.

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

(i) We apply the percentage-of-completion method to certain 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 be met through the receipt of cash or an irrevocable letter of credit from a highly credit worthy lending institution.

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

(iii) We may also record revenue for certain sales arrangements after construction of a 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.

Systems Project Pipeline

The following tables summarize, as of October 31, 2012, our approximately 3.0 GW AC systems business advanced project pipeline. As of September 30, 2012, for the Projects Sold/ Under Contract in our project pipeline of approximately 2.0 GW AC,

we have recognized revenue with respect to the equivalent of approximately 626 MW AC. Such MW AC equivalent amount refers to the ratio of revenue recognized for the Projects Sold/ Under Contract in our 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 September 30, 2012 for the projects sold/under contract in our project pipeline is expected to be approximately $5.3 billion. Such amount is expected to be recognized as revenue through the substantial completion dates of the projects sold/ under contract. Projects are removed from our project pipeline tables below once we have completed construction and after substantially all revenue has been recognized.

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 are constructing)

Project/Location	Project Size in MW AC (1)	Power Purchase Agreement (PPA)	Third Party Owner/Purchaser	Expected Substantial Completion Year
Topaz, California	550	PG&E	MidAmerican	2014/ 2015
Sunlight, California	550	PG&E / SCE	NextEra/GE/Sumitomo	2014/ 2015
Agua Caliente, Arizona	290	PG&E	NRG / MidAmerican	2014
AV Solar Ranch One, California	230	PG&E	Exelon	2013
Copper Mountain 2, Nevada	150	PG&E	Sempra (2)	2012/ 2015 (4)
Imperial Energy Center South, California	130	SDG&E	Tenaska (2)	2013
Alpine, California	66	PG&E	NRG (2)	2012/ 2013
Avra Valley, Arizona	26	Tucson EP	NRG (2)	2012
Walpole, Ontario, Canada	20	OPA (3)	GE/Alterra	2013
Belmont, Ontario, Canada	20	OPA (3)	GE/Alterra	2012/ 2013
Amherstburg 1, Ontario, Canada	10	OPA (3)	GE/Alterra	2012/ 2013
Total	2,042			

Projects Permitted – Not Sold/Contracted

Project/Location	Project Size in MW AC (1)	Power Purchase Agreement (PPA)	Expected Substantial Completion Year
Maryland Solar, Maryland	20	FE Solutions	2012/ 2013
Total	20		

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

Project/Location	Project Size in MW AC (1)	Power Purchase Agreement (PPA)	Expected Substantial Completion Year
Stateline, California	300	SCE	2016
Silver State South, Nevada	250	SCE	2016
AGL, Australia (5)	159	AGL (2)	2015
Campo Verde, California	139	SDG&E	2013
Other Projects, North America	92	Various	2013 - 2019
Other Projects, Middle East	13	DEWA (2)	2013
Total	953		

Key:

(1) The volume of modules installed in MW DC (“direct current”) will be higher than the MW AC (“alternating current”) size pursuant to a DC-AC ratio typically ranging from 1.2-1.4. Such ratio varies across different projects due to various system design factors

(2) EPC contract or partner developed project
(3) OPA = Ontario Power Authority RESOP program

(4) Project is split into two phases with a gap in time between expected substantial completion dates
(5) Subject to financial close and execution of EPC contracts

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 items. 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 accrue shipping, warranty and solar module collection and recycling costs to our cost of sales.

Overall, we expect our cost of sales per watt to decrease over the next several years due to an increase in watts per solar module, 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 underutilize 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 installation labor costs), site specific costs, and development costs (including transmission upgrade costs, interconnection fees, and permitting costs).

As further described in Note 21. “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.

We expect cost of sales to decline as we reduce costs in connection with our restructuring activities, which is a component of our Long Term Strategic Plan.

Gross profit

Gross profit is affected by numerous factors, including our module average selling prices, competitive pressures, market demand, market mix, our manufacturing costs, BoS costs, project development costs, the effective utilization of our production facilities, foreign exchange rates, and the existence and effectiveness of subsidies and other economic incentives. 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, 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. We acquire equipment for general use in further process and product development and record the depreciation of this equipment as research and development expense. Currently, the majority of our research and development expenses are attributable to our components segment.

See Note 4. “Restructuring,” to our consolidated financial statements included in this Quarterly Report on Form 10-Q.

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 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 selling expenses. We expect selling, general and administrative expense to decline as we reduce costs in connection with our restructuring activities, which is a component of our Long Term Strategic Plan.

Our systems segment 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 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. Infrequent and other miscellaneous costs, including restructuring and manufacturing excursions, are included in the components or systems segment operating results based upon which segment incurred the underlying costs.

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. Costs related to equipment upgrades and implementation of manufacturing process improvements are also included in production start-up expense. Additionally, it 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. Production start-up expense is attributable to our components segment. The balancing of our production capabilities with market demand is a core component of our manufacturing capacity expansion strategy and our Long Term Strategic Plan.

See Note 4. “Restructuring,” to our consolidated financial statements included in this Quarterly Report on Form 10-Q.

Restructuring

Restructuring expenses include those expenses incurred related to various 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. Such restructuring costs are presented within “Restructuring” on the condensed consolidated statements of operations. Expenses recognized for restructuring activities are discussed further above under “Executive Overview –Restructuring.”

Foreign currency gain (loss)

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

Income tax expense

Income taxes are imposed on our 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%, whereas the tax rates in Germany and Malaysia are approximately 29.3% 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 generally accepted accounting principles in the United States of America (“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 revenue recognition, allowances for doubtful accounts receivable, inventory valuation, estimates of future cash flows from and the economic useful lives of long-lived assets, asset impairments, certain accrued liabilities, income taxes and tax valuation allowances, reportable segment allocations, accrued warranty and related expense, accrued collection and recycling expense, share-based compensation expense, and fair value estimates. 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.

Results of Operations

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

	Three Months Ended				Nine Months Ended			
	September 30, 2012		September 30, 2011		September 30, 2012		September 30, 2011	
Net sales	100.0	%	100.0	%	100.0	%	100.0	%
Cost of sales	71.6	%	62.3	%	75.6	%	60.4	%
Gross profit	28.4	%	37.7	%	24.4	%	39.6	%
Research and development	3.9	%	3.8	%	4.4	%	4.9	%
Selling, general and administrative	8.8	%	11.2	%	9.5	%	13.6	%
Production start-up	0.2	%	0.5	%	0.3	%	1.3	%
Restructuring	2.9	%	—	%	19.4	%	—	%
Operating income (loss)	12.8	%	22.1	%	(9.1	)%	19.8	%
Foreign currency gain (loss)	—	%	(0.2	)%	—	%	—	%
Interest income	0.4	%	0.3	%	0.4	%	0.5	%
Interest expense, net	(0.3	)%	—	%	(0.5	)%	—	%
Other income (expense), net	0.4	%	(0.1	)%	—	%	—	%
Income tax expense	2.7	%	2.6	%	1.8	%	2.6	%
Net income (loss)	10.5	%	19.5	%	(10.9	)%	17.7	%

Three Months Ended September 30, 2012 and September 30, 2011

Net sales

(Dollars in thousands)	Three Months Ended September 30, 2012	September 30, 2011	Three Month Period Change			
Net sales	$839,147	$ 1,005,788	$(166,641	)	(17	)%

The 17% decrease in net sales during the three months ended September 30, 2012 compared with the three months ended September 30, 2011 was primarily due to a 48% decrease in net sales in the components segment, partially offset by a 21% increase in net sales in the systems segment.

The components segment change is attributed to a 76% decrease in volume and a 31% decrease in average selling price of modules sold to third parties, partially offset by a 15% increase in net sales for modules used in our systems

projects.

Net sales for our systems segment, which excludes solar modules used in our systems projects, increased by $97.1 million or 21%, during the three months ended September 30, 2012 compared with the three months ended September 30, 2011, primarily due to an increase in the number and size of the various utility-scale solar power systems under construction between the periods. Please see “Item 2 - Results of Operations - Business Segment Review - Systems Segment” for more information. Due to the distinct size and terms of the underlying sales arrangements for each project under construction, timing of revenue recognition may create uneven net sales patterns, making year over year comparisons less meaningful.

Cost of sales

(Dollars in thousands)	Three Months Ended September 30, 2012	September 30, 2011	Three Month Period Change	
Cost of sales	$600,431	$626,624	$(26,193)	(4)%
% of net sales	71.6%	62.3%		

The 4% decrease in cost of sales during the three months ended September 30, 2012 compared with the three months ended September 30, 2011 was primarily due to a reduction in the total volume of solar modules sold and continuous cost reductions in our manufacturing process and a $22.1 million decrease from expense for costs associated with voluntary remediation efforts incurred in the third quarter of 2011 for our manufacturing excursion occurring during the period between June 2008 and June 2009 ("2008-2009 manufacturing excursion"). These items were partially offset by a $73.5 million increase in BoS and other construction costs related to an increase in the number and size of various utility-scale solar power systems under construction between the periods, a $15.8 million increase in expense for costs associated with voluntary remediation efforts for workmanship issues affecting a limited number of solar modules manufactured between October 2008 and June 2009, a $5.3 million increase related to accelerated depreciation for manufacturing equipment that will be replaced as part of our planned equipment upgrade programs and a $3.0 million increase for certain lower of cost or market inventory write-downs primarily as a result of declines in market pricing.

Our average manufacturing cost per watt decreased by $0.04, or 5%, from $0.74 in the three months ended September 30, 2011 to $0.70 in the three months ended September 30, 2012 and included $0.01 of non-cash share-based compensation. The decrease was primarily due to increased solar module efficiencies realized partially offset by increased underutilization since the three months ended September 30, 2011.

Gross profit

(Dollars in thousands)	Three Months Ended September 30, 2012	September 30, 2011	Three Month Period Change	
Gross profit	$238,716	$379,164	$(140,448)	(37)%
% of net sales	28.4%	37.7%		

Gross profit as a percentage of net sales decreased by 9.3 percentage points in the three months ended September 30, 2012 compared with the three months ended September 30, 2011. This decrease was primarily attributable to a 11.0 percentage point decrease primarily due to lower third-party module average selling prices, a 4.2 percentage point decrease due to lower systems module average selling prices, a 1.9 percentage point decrease due to costs associated with voluntary remediation efforts for workmanship issues affecting a limited number of solar modules manufactured between October 2008 and June 2009, a 0.6 percentage point decrease due to accelerated depreciation on certain manufacturing equipment that will be replaced as part of our planned equipment upgrade programs, and a 0.4 percentage point decrease resulting from lower of cost or market inventory write-down due to declines in market pricing during the current quarter. These decreases were partially offset by a 6.6 percentage point increase in our system segment gross profit due to the mix of projects under construction between the periods and a 2.2 percentage point increase related to decreased costs incurred in the third quarter of 2011 associated with voluntary remediation efforts for our 2008-2009 manufacturing excursion.

Research and development

(Dollars in thousands)	Three Months Ended September 30, 2012	September 30, 2011	Three Month Period Change

Research and development	$32,372	$38,164	$(5,792)	(15)%
% of net sales	3.9 %	3.8 %		

The decrease in research and development expense of $5.8 million was primarily due to a $5.9 million decrease in personnel-related expenses, driven primarily by a decrease in share-based compensation expense of $3.1 million. Additionally, we incurred a $1.5 million decrease in testing and qualification materials costs. For the three months ended September 30, 2012, share-based compensation expense decreased from the three months ended September 30, 2011, as a result of the impact of an increase in our actual forfeitures due to restructuring activities and estimated forfeiture rate for share-based compensation awards during the third

quarter of 2012. These decreases were partially offset by a $1.6 million increase in facility and other expenses.

During the three months ended September 30, 2012, 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 11.7% for the three months ended September 30, 2011 to 12.7% for the three months ended September 30, 2012.

Selling, general and administrative

(Dollars in thousands)	Three Months Ended September 30, 2012	Three Months Ended September 30, 2011	Three Month Period Change	
Selling, general and administrative	$73,507	$112,743	$(39,236)	(35)%
% of net sales	8.8 %	11.2 %		

The decrease in selling, general and administrative expense of $39.2 million between the periods was primarily due to a $16.5 million decrease in salaries and personnel-related expenses, primarily driven by a decrease in share-based compensation expense of $8.9 million, a $4.1 million decrease in project development and selling costs and a $3.4 million decrease in professional services. For the three months ended September 30, 2012, share-based compensation expense decreased from the three months ended September 30, 2011, primarily as a result of an increase in our actual forfeitures due to restructuring activities and estimated forfeiture rate for share-based compensation awards during the third quarter of 2012. Additionally, there was a $10.5 million decrease related to an allowance for doubtful accounts expense in the third quarter of 2011, a $8.6 million decrease for estimated nonrecurring post-sale expenses incurred in the third quarter of 2011 related to the 2008 - 2009 manufacturing excursion, and an increase of $2.1 million of other expenses. These decreases were partially offset by a $1.8 million increase in infrastructure expenses including facility depreciation.

Production start-up

(Dollars in thousands)	Three Months Ended September 30, 2012	Three Months Ended September 30, 2011	Three Month Period Change	
Production start-up	$1,595	$5,514	$(3,919)	(71)%
% of net sales	0.2 %	0.5 %		

During the three months ended September 30, 2012, we incurred $1.6 million 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. During the three months ended September 30, 2011, we incurred $5.5 million of production start-up expenses primarily for our previously planned manufacturing capacity expansions in Arizona and Vietnam.

Production start-up expense includes costs related to equipment upgrades and implementation of manufacturing process improvements.

Restructuring

(Dollars in thousands)	Three Months Ended September 30, 2012	Three Months Ended September 30, 2011	Three Month Period Change	
Restructuring	$24,197	$—	$24,197	100 %
% of net sales	2.9 %	— %		

During the three months ended September 30, 2012, we incurred $24.2 million of restructuring expenses due to charges relating to a series of restructuring initiatives. See Note 4. "Restructuring," to our condensed consolidated financial statements included with this Quarterly Report on Form 10-Q for additional information.

Foreign currency gain (loss)

(Dollars in thousands)	Three Months Ended September 30, 2012	September 30, 2011	Three Month Period Change	
Foreign currency gain (loss)	$3	$(1,857)	$1,860	100%

57

Foreign currency gain during the three months ended September 30, 2012 increased compared to the three months ended September 30, 2011, primarily due to a change in our net foreign currency denominated assets and liabilities between the periods.

Interest income

(Dollars in thousands)	Three Months Ended September 30, 2012	September 30, 2011	Three Month Period Change	
Interest income	$3,405	$ 3,225	$180	6 %

Interest income remained consistent during the three months ended September 30, 2012 compared with the three months ended September 30, 2011.

Interest expense, net

(Dollars in thousands)	Three Months Ended September 30, 2012	September 30, 2011	Three Month Period Change	
Interest expense, net	$(2,902)	$ —	$(2,902)	(100)%

Interest expense, net of amounts capitalized, increased during the three months ended September 30, 2012 compared with the three months ended September 30, 2011, primarily as a result of an increase in long-term debt. The increase was partially offset by an increase in the amount of assets under construction and project assets that qualify for capitalized interest during the three months ended September 30, 2012 compared with the three months ended September 30, 2011, reducing 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 reporting period.

Other income (expense), net

(Dollars in thousands)	Three Months Ended September 30, 2012	September 30, 2011	Three Month Period Change	
Other income (expense), net	$3,210	$ (1,346)	$4,556	338 %

Other income (expense), net, increased during the three months ended September 30, 2012 compared with the three months ended September 30, 2011, primarily as a result of a gain on the settlement of long-term debt during the three months ended September 30, 2012.

Income tax expense

(Dollars in thousands)	Three Months Ended September 30, 2012	September 30, 2011	Three Month Period Change	
Income tax expense	$22,844	$26,251	$(3,407)	(13)%
Effective tax rate	20.6 %	11.8 %		

Income tax expense decreased by $3.4 million during the three months ended September 30, 2012 compared with the three months ended September 30, 2011. Substantially all of this decrease resulted from a $112.0 million decrease in

pre-tax income partially offset by a greater percentage of profits earned in higher tax jurisdictions. See Note 17. "Income Taxes," to our condensed consolidated financial statements included with this Quarterly Report on Form 10-Q for additional information.

Nine Months Ended September 30, 2012 and September 30, 2011

Net sales

(Dollars in thousands)	Nine Months Ended September 30, 2012	Nine Months Ended September 30, 2011	Nine Month Period Change		
Net sales	$2,293,534	$ 2,105,855	$187,679	9	%

The 9% increase in net sales during the nine months ended September 30, 2012 compared with the nine months ended September 30, 2011 was primarily due to a 190% increase in net sales in the systems segment, partially offset by a 53% decrease in net sales in the components segment.

The components segment change is attributed to a 79% decrease in volume and a 34% decrease in the average selling price of modules sold to third parties, partially offset by a 95% increase in net sales for modules used in our systems projects.

Net sales for our systems segment, which excludes solar modules used in our systems projects, increased by $1,019.3 million or 190%, during the nine months ended September 30, 2012 compared with the nine months ended September 30, 2011, primarily due to an increase in the number and size of the various utility-scale solar power systems under construction between the periods. Due to the distinct size and terms of the underlying sales arrangements for each project under construction, timing of revenue recognition may create uneven net sales patterns, making year over year comparisons less meaningful.

Cost of sales

(Dollars in thousands)	Nine Months Ended September 30, 2012		Nine Months Ended September 30, 2011		Nine Month Period Change		
Cost of sales	$1,734,332		$1,272,228		$462,104	36	%
% of net sales	75.6	%	60.4	%			

The 36% increase in cost of sales during the nine months ended September 30, 2012 compared with the nine months ended September 30, 2011 was primarily due to a $616.5 million increase in BoS and other construction costs related to an increase in the number and size of various utility-scale solar power systems under construction between the periods. There was also a $42.4 million increase related to the underutilization of our manufacturing capacity primarily related to the idling of manufacturing lines in Perrysburg, Malaysia and Germany during portions of the first nine months of 2012, a $24.4 million increase related to accelerated depreciation for certain manufacturing equipment that will be replaced as part of our planned equipment upgrade programs, a $16.2 million increase for certain lower of cost or market inventory write-downs primarily as a result of declines in market pricing, a $15.8 million increase in expense for costs associated with voluntary remediation efforts for a workmanship issue affecting a limited number of solar modules manufactured between October 2008 and June 2009 and a $13.8 million increase in expense for costs associated with voluntary remediation efforts for our 2008-2009 manufacturing excursion. These increases were partially offset by reductions in the total volume of modules sold and continuous cost reductions in our manufacturing process.

Our average manufacturing cost per watt decreased by $0.02 or 3% from $0.75 for nine months ended September 30, 2011 to $0.73 for the nine months ended September 30, 2012 and included $0.01 of non-cash share-based compensation. The decrease is the result of increased module conversion efficiencies realized, partially offset by increased underutilization during the nine months ended September 30, 2012.

Gross profit

(Dollars in thousands)	Nine Months Ended	Nine Month Period Change

	September 30, 2012	September 30, 2011		
Gross profit	$559,202	$833,627	$(274,425)	(33)%
% of net sales	24.4%	39.6%		

Gross profit as a percentage of net sales decreased by 15.2 percentage points in the nine months ended September 30, 2012 compared with the nine months ended September 30, 2011. This decrease was primarily attributable to a 25.5 percentage point decrease due to lower third-party module average selling prices, a 1.8 percentage point decrease related to plant underutilization, a 1.3 percentage point decrease resulting from lower of cost or market inventory write-downs due to declines in market pricing during the nine months ended September 30, 2012, a 1.2 percentage point decrease due to lower module gross profit for modules used in our systems projects, a 1.1 percentage point decrease due to accelerated depreciation on certain manufacturing equipment that will be replaced as part of our planned equipment upgrade programs, a 0.7 percentage point decrease related to costs associated

with voluntary remediation efforts for a workmanship issue potentially affecting a limited number of solar modules manufactured between October 2008 and June 2009 and a 0.5 percentage point decrease related to costs associated with voluntary remediation efforts for our 2008 - 2009 manufacturing excursion. These decreases were partially offset by a 16.9 percentage point increase in systems segment gross profit due to the mix of projects under construction between the periods.

Research and development

(Dollars in thousands)	Nine Months Ended September 30, 2012	Nine Months Ended September 30, 2011	Nine Month Period Change	
Research and development	$100,821	$102,617	$(1,796)	(2)%
% of net sales	4.4%	4.9%		

The decrease in research and development expense of $1.8 million was primarily due to $7.0 million decrease in personnel-related expenses, primarily driven by decreases in share-based compensation expense of $6.3 million. Additionally, we incurred a decrease of $1.0 million primarily in facility expenses. For the nine months ended September 30, 2012, share based compensation expense decreased from the nine months ended September 30, 2011, primarily as a result of the impact of an increase in our actual forfeitures primarily due to restructuring activities and estimated forfeiture rate for share based compensation awards during the first nine months of 2012. These decreases were partially offset by a $4.0 million increase in testing and qualification materials costs and a $2.2 million increase in other expenses.

During the nine months ended September 30, 2012, we continued the development of solar modules with increased efficiencies at converting sunlight into electricity and increased the average conversion efficiency of our modules from 11.7% for the nine months ended September 30, 2011 to 12.6% for the nine months ended September 30, 2012.

Selling, general and administrative

(Dollars in thousands)	Nine Months Ended September 30, 2012	Nine Months Ended September 30, 2011	Nine Month Period Change	
Selling, general and administrative	$217,511	$286,615	$(69,104)	(24)%
% of net sales	9.5%	13.6%		

The decrease in selling, general and administrative expense of $69.1 million between the periods was primarily due to a $57.5 million decrease in salaries and personnel-related expenses, primarily driven by a decrease in share-based compensation expense of $48.4 million, a $14.4 million decrease in project development and selling costs, and a $8.4 million decrease in professional services. For the nine months ended September 30, 2012, share-based compensation expense decreased from the nine months ended September 30, 2011, primarily as a result of the impact of an increase in our actual forfeitures due to restructuring activities and estimated forfeiture rate for share-based compensation awards. Additionally, there was a $10.5 million decrease relating to allowance for doubtful accounts expense during the nine months ended September 30, 2011. These decreases were partially offset by a $7.4 million increase in estimated compensation payments due to customers, under certain circumstances, for power lost prior to the remediation of the customer's system under our voluntary remediation program related to the 2008-2009 manufacturing excursion, a $10.1 million increase in infrastructure expenses including facility and infrastructure deprecation, and a $4.2 million increase in other expenses.

Production start-up

(Dollars in thousands)	Nine Months Ended	Nine Month Period Change

	September 30, 2012		September 30, 2011					
Production start-up	$6,186		$27,739		$(21,553	)	(78	)%
% of net sales	0.3	%	1.3	%				

During the nine months ended September 30, 2012, we incurred $6.2 million 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 as well as certain expenses related to our previously planned manufacturing capacity expansions in Vietnam and Arizona. During the nine months ended September 30, 2011, we incurred $27.7 million of production start-up expenses primarily for our manufacturing capacity expansions in Malaysia and Germany and our previously planned manufacturing expansions in France, Vietnam, and Arizona.

Production start-up expense includes costs related to equipment upgrades and implementation of manufacturing process improvements.

Restructuring

(Dollars in thousands)	Nine Months Ended September 30, 2012	September 30, 2011	Nine Month Period Change	
Restructuring	$444,262	$—	$444,262	100 %
% of net sales	19.4 %	— %		

During the nine months ended September 30, 2012, we incurred $444.3 million of restructuring expenses due to charges relating to a series of restructuring initiatives. See Note 4. "Restructuring," to our condensed consolidated financial statements included with this Quarterly Report on Form 10-Q for additional information.

Foreign currency gain (loss)

(Dollars in thousands)	Nine Months Ended September 30, 2012	September 30, 2011	Nine Month Period Change	
Foreign currency gain (loss)	$34	$ 752	$(718)	(95)%

Foreign currency gain decreased during the nine months ended September 30, 2012 compared with the nine months ended September 30, 2011, primarily due to a change in our net foreign currency denominated assets and liabilities between the periods.

Interest income

(Dollars in thousands)	Nine Months Ended September 30, 2012	September 30, 2011	Nine Month Period Change	
Interest income	$9,695	$ 9,665	$30	— %

Interest income remained consistent during the nine months ended September 30, 2012 compared with the nine months ended September 30, 2011.

Interest expense, net

(Dollars in thousands)	Nine Months Ended September 30, 2012	September 30, 2011	Nine Month Period Change	
Interest expense, net	$(11,194)	$ —	$(11,194)	(100)%

Interest expense, net of amounts capitalized, increased during the nine months ended September 30, 2012 compared with the nine months ended September 30, 2011, primarily due to $4.7 million in expense during the nine months ended September 30, 2012 associated with the repayment of our German Facility Agreement. The remaining increase is primarily related to an increase in long-term debt between the periods. These increases were partially offset by an increase in the amount of assets under construction and project assets that qualify for capitalized interest during the nine months ended September 30, 2012 compared to the nine months ended September 30, 2011, reducing 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 reporting period.

Other income (expense), net

(Dollars in thousands)	Nine Months Ended September 30, 2012	September 30, 2011	Nine Month Period Change	
Other income (expense), net	$665	$ 656	$9	1 %

Other income (expense), net, remained constant during the nine months ended September 30, 2012 compared with the nine months ended September 30, 2011.

Income tax expense

(Dollars in thousands)	Nine Months Ended September 30, 2012	September 30, 2011	Nine Month Period Change	
Income tax expense	$40,138	$54,109	$(13,971)	(26)%
Effective tax rate	(19.1)%	12.7 %		

Income tax expense decreased by $14.0 million during the nine months ended September 30, 2012 compared with the nine months ended September 30, 2011. The reduction in income tax expense was primarily attributable to a loss from operations during the nine months ended September 30, 2012 as compared to having an operating profit during the nine months ended September 30, 2011, offset by an increase in tax expense related to the establishment of valuation allowances of $12.3 million against previously established deferred tax assets, operating losses being generated in jurisdictions for which no tax benefit is recorded, and a greater percentage of profits earned in higher tax jurisdictions. The income tax expense of $40.1 million for the nine months ended September 30, 2012 resulted from our pre-tax losses, exclusive of the $444.3 million of restructuring expenses, for which a nominal net tax benefit was recognized. See Note 17. “Income Taxes,” to our condensed consolidated financial statements included with this Quarterly Report on Form 10-Q for additional information.

Business Segment Review

(Dollars in thousands)	Three Months Ended September 30, 2012	September 30, 2011	% Change	Nine Months Ended September 30, 2012	September 30, 2011	% Change
Net sales						
Components	$281,900	$ 545,620	(48)%	$737,711	$ 1,569,298	(53)%
Systems	557,247	460,168	21 %	1,555,823	536,557	190 %
Total	$839,147	$ 1,005,788	(17)%	$2,293,534	$ 2,105,855	9 %
(Loss) income before income taxes (Segment profit)						
Components	$(62,949)	$ 87,258	(172)%	$(669,320)	$ 391,703	(271)%
Systems	173,710	135,507	28 %	458,942	36,026	1,174 %
Total	$110,761	$ 222,765	(50)%	$(210,378)	$ 427,729	(149)%

ASC 280, Segment Reporting, establishes standards for companies to report in their financial statements information about operating segments, products, services, geographic areas, and major customers. The method of determining what information to report is generally based on the way that management organizes the operating segments within the Company for making operating decisions and assessing financial performance.

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 operators of renewable energy projects.

Our second segment is our fully integrated systems business (“systems segment”), through which we provide a complete PV solar power system, which includes project development, engineering, procurement and construction (“EPC”) products, operating and maintenance (“O&M”) services, when applicable, and project finance, when required. We may provide our full EPC product or any combination of individual products within our EPC capabilities. 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.

Our Chief Operating Decision Maker ("CODM"), consisting of certain members of senior executive staff, views both our ability to provide customers with a complete PV solar power system through the fully integrated systems segment and the manufacturing of solar modules from the components segment as the drivers of our resource allocation, profitability, and cash flows. The complete PV solar power systems sold through our systems segment drive resource allocation, profitability, and cash flows through delivering state of the art construction techniques and process management to reduce the installed cost of our PV systems, and accordingly, the systems segment is considered by our CODM as a direct contributor to our profitability. Therefore, our CODM views both our components and systems segments as contributors to our operating results.

Prior to June 30, 2012, our CODM viewed the systems segment as an enabler to drive module throughput from our components segment, with a primary objective to achieve break-even results before income taxes. During the three months ended June 30, 2012, we finalized and announced the details related to our Long Term Strategic Plan, which is primarily focused on providing complete utility scale PV solar power solutions, which use our modules, to sustainable markets. Additionally, James Hughes was appointed as Chief Executive Officer during such quarter. These factors led to a change in how our CODM views and measures the profitability of our operating segments and which therefore changed the information reviewed by our CODM to allocate resources and evaluate profitability of such segments.

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.

After we have determined the amount of revenue earned for our systems projects following the applicable accounting guidance for the underlying sales arrangements, we allocate module revenue from the systems segment to the components segment based on how our CODM strategically views these segments. The amount of module revenue allocated from the systems segment to the components segment is equal to an estimated average selling price for such solar modules as if the modules were sold to a third party EPC customer through a long term supply agreement that establishes pricing at the beginning of each year. In order to develop the estimate of the average selling price used for this revenue allocation, we utilize a combination of our actual third party module sale transactions, our competitor benchmarking and our internal pricing lists used to provide module price quotes to customers. This allocation methodology and the estimated average selling prices are consistent with how our CODM views the value proposition our components business brings to a utility scale systems project and the financial information reviewed by our CODM in assessing our components business performance.

Our components and systems segments have certain of their 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 the respective selling, general and administrative costs for our components and systems segments. Our corporate key functions consist primarily of company-wide corporate tax, corporate treasury, corporate accounting/finance, corporate legal, investor relations, corporate communications, 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. Infrequent and other miscellaneous costs including restructuring and manufacturing excursions are included in the components or systems segment operating results based upon which segment incurred the underlying costs.

Prior period segment information has been restated to conform to the three months ended September 30, 2012, presentation. None of the changes in the measure of our operating segments profitability impact the determination of our reportable operating segments or our previously reported consolidated financial results.

See Note 21. “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 systems project pipeline. Due to the distinct size and terms of the underlying sales arrangements for each project under construction, timing of revenue recognition my create uneven net sales patterns, making year over year comparisons less meaningful.

Components Segment

(Dollars in thousands)	Three Months Ended September 30, 2012	September 30, 2011	% Change	Nine Months Ended September 30, 2012	September 30, 2011	% Change
Net sales	$281,900	$ 545,620	(48)%	$737,711	$ 1,569,298	(53)%
Cost of sales	$259,353	$ 359,021	(28)%	$747,975	$ 902,353	(17)%
(Loss) income before income taxes (Segment profit)	$(62,949)	$ 87,258	(172)%	$(669,320)	$ 391,703	(271)%

Components segment net sales decreased by 48% in the three months ended September 30, 2012 compared with the three months ended September 30, 2011, primarily due to a 76% decrease in volume and a 31% decrease in average selling price of modules sold to third parties, partially offset by a 15% increase in net sales for modules used in our systems projects. The 15% increase in net sales for modules used in our systems business was primarily related to our AV Solar Ranch One, Topaz and Copper Mountain 2 projects, partially offset by decreases in net sales from our Agua Caliente and Amherstburg 2 projects.

Components segment net sales decreased by 53% in the nine months ended September 30, 2012 compared with the nine months ended September 30, 2011, primarily due to a 79% decrease in volume and a 34% decrease in the average selling price of modules sold to third parties, partially offset by a 95% increase in module net sales for modules used in our systems projects. The 95% increase in net sales for modules used in our systems business was primarily related to our Copper Mountain 2, AV Solar Ranch One, Silver State North and Topaz projects, partially offset by decreases in net sales from our Agua Caliente project.

Components segment cost of sales decreased by 28% in the three months ended September 30, 2012 compared with the three months ended September 30, 2011, primarily due to reduction in the total volume of solar modules sold and continuous cost reductions in our manufacturing process and a reduction in expense for costs associated with voluntary remediation efforts for our manufacturing excursion occurring during the period between June 2008 and June 2009 (“2008-2009 manufacturing excursion”). These items were partially offset by increases in expense for costs associated with voluntary remediation efforts for workmanship issues affecting a limited number of solar modules manufactured between October 2008 and June 2009, accelerated depreciation for manufacturing equipment that will be replaced as part of our planned equipment upgrade programs and certain lower of cost or market inventory write-downs primarily as a result of declines in market pricing

Components segment cost of sales decreased by 17% in the nine months ended September 30, 2012 compared with the nine months ended September 30, 2011, primarily due to a lower volume of solar module sales and cost reductions, partially offset by higher underutilization, accelerated depreciation for certain manufacturing equipment, inventory write-downs, and an increase in expense for costs associated with voluntary remediation efforts for a workmanship issue affecting a limited number of solar modules manufactured between October 2008 and June 2009 and higher expense from costs associated with our voluntary remediation efforts for our 2008-2009 manufacturing excursion.

Components segment profit decreased by 172% in the three months ended September 30, 2012 compared with the three months ended September 30, 2011, primarily due to lower net sales which resulted from a decrease in both sales volumes and average selling prices as detailed above.

Components segment profit decreased by 271% in the nine months ended September 30, 2012 compared with the nine months ended September 30, 2011, primarily due to lower net sales which resulted from a decrease in both sales volumes and average selling prices, costs associated with our voluntary remediation efforts for our 2008-2009 manufacturing excursion, inventory write-downs, underutilization charges, and expenses relating to a series of restructuring initiatives.

Systems Segment

(Dollars in thousands)	Three Months Ended				Nine Months Ended			
	September 30, 2012	September 30, 2011	% Change		September 30, 2012	September 30, 2011	% Change	
Net sales	$557,247	$ 460,168	21	%	$1,555,823	$ 536,557	190	%
Cost of sales	$341,078	$ 267,603	27	%	$986,357	$ 369,875	167	%
Income (loss) before income taxes (Segment profit)	$173,710	$ 135,507	28	%	$458,942	$ 36,026	1,174	%

Systems segment net sales, which excludes solar modules used in our systems projects, increased from $460.2 million in the three months ended September 30, 2011 to $557.2 million in the three months ended September 30, 2012, primarily due to an

increase in net sales from our Topaz, AV Solar Ranch One, Copper Mountain 2, Avra Valley, and Alpine projects, partially offset by decreases in net sales from our Agua Caliente and Amherstburg 2 projects.

Systems segment net sales, which excludes solar modules used in our systems projects, increased from $536.6 million in the nine months ended September 30, 2011 to $1,555.8 million in the nine months ended September 30, 2012, primarily due to an increase in net sales from our AV Solar Ranch One, Topaz, Copper Mountain 2, Silver State North and Alpine projects, partially offset by a decrease in net sales from our Agua Caliente project.

Systems segment cost of sales increased from $267.6 million in the three months ended September 30, 2011 to $341.1 million in the three months ended September 30, 2012, primarily due to an increase in the number and size of various utility-scale solar power systems under construction between the periods as described above. See also Item 2: “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Financial Operations Overview – Cost of Sales – Systems Business” for a description of cost of sales for our systems business.

Systems segment cost of sales increased from $369.9 million in the nine months ended September 30, 2011 to $986.4 million in the nine months ended September 30, 2012, primarily due to an increase in the number and size of various utility-scale solar power systems under construction between the periods as described above.

Systems segment income before income taxes increased from $135.5 million for the three months ended September 30, 2011 to $173.7 million for the three months ended September 30, 2012 primarily due to an increase in the number and size of various utility-scale solar power systems under construction between the periods as described above.

Systems segment income before income taxes increased from $36.0 million for the nine months ended September 30, 2011 to $458.9 million for the nine months ended September 30, 2012 primarily due to an increase in the number and size of various utility-scale solar power systems under construction between the periods as described above.

See Note 21. “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 systems project pipeline.

Product Revenue

The following table sets forth the total amounts of solar modules and solar power systems revenue recognized for the three and nine months ended September 30, 2012 and September 30, 2011. 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 does not include any systems segment product or service offerings, (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.

(Dollars in thousands)	Three Months Ended September 30, 2012	Three Months Ended September 30, 2011	Nine Months Ended September 30, 2012	Nine Months Ended September 30, 2011
Solar module revenue	$59,703	$ 351,728	$181,710	$ 1,284,820
Solar power system revenue	779,444	654,060	2,111,824	821,035
Net sales	$839,147	$ 1,005,788	$2,293,534	$ 2,105,855

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, revenues, 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 revenue recognition, accrued solar module collection and recycling liability, product warranties and manufacturing excursion, accounting for income taxes, reportable segment allocations, inventories, long-lived asset impairments, and goodwill have the greatest potential impact on our condensed consolidated financial statements.

Product Warranties and Manufacturing Excursions. We provide a limited warranty against defects in materials and workmanship under normal use and service conditions for 10 years following delivery to the owners of our solar modules.

We also typically warrant to the owners of our solar modules that solar modules installed in accordance with agreed-upon specifications will produce at least 90% of their labeled power output rating during the first 10 years following their installation and at least 80% of their labeled power output rating during the following 15 years. In resolving claims under both the defects and power output warranties, we have the option of either repairing or replacing the covered solar module or, under the power output warranty, providing additional solar modules to remedy the power shortfall. We also have the option to make a payment for the then current market price for solar modules to resolve claims. Our warranties are automatically transferred from the original purchasers of our solar modules to subsequent purchasers upon resale.

As an alternative to our module power output warranty, we have offered a system level module performance warranty for a limited number of our recent system sales. This system level module performance warranty is designed for utility scale systems and provides a 25-year plant-level energy degradation protection. The system level module performance warranty typically is calculated as a percentage of a systems expected energy production, adjusted for certain actual site conditions, with the warranted level of performance declining each year in a linear fashion, but never falling below 80% during the term of the warranty. In resolving claims under the system level module performance warranty to restore the system to warranted performance levels, we first must validate that the root cause is due to module performance, then we typically have the option of either repairing or replacing modules, providing supplemental modules or making a cash payment. Consistent with our module power output warranty, when we elect to satisfy a valid warranty claim by providing replacement or supplement modules under the system level module performance warranty, we do not have any labor obligation to remove or install modules.

In addition to our solar module warranty described above, for solar power plants built by our systems business, we typically provide a limited warranty on the BoS against defects in engineering design, installation and, workmanship for a period of one to two years following the substantial completion of a phase or the entire solar power plant. In resolving claims under the engineering design, installation and, workmanship warranties, we have the option of remedying the defect through repair, or replacement.

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. 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 BoS components, and our estimated per-module replacement cost. Such estimates have changed, and may in the future change, based primarily upon historical experience including additional information received from the evaluation of warranty claims and the complete processing of such claims.

We also make an estimate for the costs of any voluntary remediation programs including our 2008-2009 manufacturing excursion. Our estimates for such remediation programs have changed, and may in the future change, significantly in light of our ongoing remediation efforts and our continued analysis of the assumptions used in developing our estimates. 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 that are beyond our limited warranty. If we commit to any such remediation actions beyond our limited warranty, developing our estimates for such remediation actions may require significant management judgment.

Our estimate for remediation costs is based on evaluation and consideration of currently available information, including the estimated number of 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 any remediation services, and the post-sale expenses covered under our remediation program.

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 using actual costs incurred over total estimated costs to complete 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. We periodically revise our contract cost, revenue, and profit estimates and we immediately recognize any losses that we identify on such contracts. 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 construction contracts or other agreements specify that title to direct materials and solar modules transfers to the customer before installation has been performed, we defer revenue and associated costs and recognize revenue once 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 attached or fitted to the solar power systems as required by engineering designs. Solar modules 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.

For systems business sales arrangements that are accounted for under ASC 360, we record the sale as revenue using one of the following revenue recognition methods, based upon the substance and form of the terms and conditions of sales arrangements:

(i) We apply the percentage-of-completion method to certain 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 be met through the receipt of cash or an irrevocable letter of credit from a highly credit worthy lending institution.

(ii) Depending on the value of the initial payments and continuing payments commitment by the buyer, 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.

(iii) We may also record revenue for certain arrangements after construction of a project is substantially complete, we have transferred the usual risks and rewards of ownership to the buyer, and we have received payment from the buyer.

Inventories. We report our inventories at the lower of cost or market. We determine cost on a first-in, first-out basis and include both the costs of acquisition and the costs of manufacturing in our inventory costs. These costs include direct material, direct labor, and indirect manufacturing costs, including depreciation and amortization. Our capitalization of costs into inventory is based on normal utilization of our plants. If production capacity is abnormally underutilized, the portion of our indirect manufacturing costs related to the abnormal underutilization levels is expensed as incurred.

We regularly review the cost of inventory against its 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. We also regularly evaluate the quantities and values of our inventories in light of current market conditions and market trends and record write-downs for any quantities in excess of demand and for any product obsolescence. This evaluation considers the use of modules in our systems business, historical usage, expected demand, anticipated sales price, desired strategic raw material requirements, new product development schedules, the effect new products might have on the sale of existing products, product obsolescence, customer concentrations, product merchantability and other factors. Market conditions are subject to change and actual consumption of our inventory could differ from expected demand.

Long-Lived Asset Impairment. We are required to assess the recoverability of the carrying value of long-lived assets when an indicator of impairment has been identified. We review our long-lived assets each quarter to assess whether impairment indicators are present. We must exercise judgment in assessing whether an event of impairment has occurred. For purposes of recognition and measurement of an impairment loss, a long-lived asset or assets is grouped with other assets and liabilities at the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities. We must exercise judgment in assessing the lowest level for which identifiable cash flows are largely independent of the cash flows of other assets and liabilities.

For long-lived assets, when impairment indicators are present, we compare undiscounted future cash flows, including the eventual disposition of the asset group at market value, to the asset group's carrying value to determine if the asset group is recoverable. This assessment requires the exercise of judgment in assessing the future use of and projected value to be derived from the assets to be held and used. Assessments also consider changes in asset group utilization, including the temporary idling of capacity and the expected timing of placing this capacity back into production.

For an asset group considered held and used that fails the test of recoverability described above or for a disposal group classified as held for sale, the estimated fair value of long-lived assets may be determined using an "income approach", "market approach", "cost approach", or a combination of one or more of these approaches as appropriate for the particular asset or disposal group being reviewed. This may require judgment in estimating future cash flows, relevant discount rates, residual values, market values, and economic obsolescence applied in estimating the current fair value under these approaches. If there is an impairment, a loss is recorded to reflect the difference between the asset or disposal groups fair value and carrying value.

Our estimates are based upon our historical experience, our commercial relationships, and available information about future trends. We believe fair value assessments are most sensitive to market changes and the corresponding impact on volume and average selling prices and that these are more subjective than manufacturing cost and other assumptions. We believe our current assumptions and estimates are reasonable and appropriate.

Reportable Segment Allocations. ASC 280, Segment Reporting, establishes standards for companies to report in their financial statements information about operating segments, products, services, geographic areas, and major customers. The method of determining what information to report is generally based on the way that management organizes the operating segments within the Company for making operating decisions and assessing financial performance.

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 operators of renewable energy projects.

Our second segment is our systems segment, through which we provide a complete PV solar power system, which includes project development, engineering, EPC products, O&M services, when applicable, and project finance, when required. We may provide our full EPC product or any combination of individual products within our EPC capabilities. 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.

Our CODM, consisting of certain members of senior executive staff, views both our ability to provide customers with a complete PV solar power system through the systems segment and the manufacturing of solar modules from the components segment as the drivers of our resource allocation, profitability, and cash flows. The complete PV solar power systems sold through our systems segment drive resource allocation, profitability, and cash flows through delivering state of the art construction techniques and process management to reduce the installed cost of our PV systems, and accordingly, the systems segment is considered by our CODM as a direct contributor to our profitability. Therefore, our CODM views both our components and systems segments as contributors to our operating results.

Prior to June 30, 2012, our CODM viewed the systems segment as an enabler to drive module throughput from our components segment, with a primary objective to achieve break-even results before income taxes. During the three months ended June 30, 2012, we finalized and announced the details related to our Long Term Strategic Plan, which is primarily focused on providing complete utility scale PV solar power solutions, which use our modules, to sustainable markets. Additionally, James Hughes was appointed as Chief Executive Officer during such quarter. These factors led to a change in how our CODM views and measures the profitability of our operating segments, which therefore changed the information reviewed by our CODM to allocate resources and evaluate profitability of such segments.

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.

After we have determined the amount of revenue earned for our systems projects following the applicable accounting guidance for the underlying sales arrangements, we allocate module revenue from the systems segment to the components segment based on how our CODM strategically views these segments. The amount of module revenue allocated from the systems segment to the components segment is equal to an estimated average selling price for such solar modules as if the modules were sold to a third party EPC customer through a long term supply agreement that

establishes pricing at the beginning of each year. In order to develop the estimate of the average selling price used for this revenue allocation, we utilize a combination of our actual third party module sale transactions, our competitor benchmarking and our internal pricing lists used to provide module price quotes to customers. This allocation methodology and the estimated average selling prices are consistent with how our CODM views the value proposition our components business brings to a utility scale systems project and the financial information reviewed by our CODM in assessing our components business performance.

Our components and systems segments have certain of their 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 the respective selling, general and administrative costs for our components and systems segments. Our corporate key functions consist primarily of company-wide corporate tax, corporate treasury, corporate accounting/finance, corporate legal,

investor relations, corporate communications, 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. Infrequent and other miscellaneous costs, including restructuring and manufacturing excursions are included in the components or systems segment operating results based upon which segment incurred the underlying costs.

See Note 21. “Segment Reporting,” to our condensed consolidated financial statements included with this Quarterly Report on Form 10-Q for more information.

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, 2011 filed with the Securities and Exchange Commission.

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 September 30, 2012, although we have a net loss for the nine months ended September 30, 2012, we believe that our cash, cash equivalents, and marketable securities, cash flows from operating activities including the contracted portion of our 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 Long Term Strategic Plan 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 Long Term Strategic Plan.

We intend to maintain appropriate debt levels based upon cash flow expectations, the overall cost of capital, cash requirements for operations, capital expenditures, and discretionary strategic spending. 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 investor interest due to industry-wide or company-specific concerns. Such financings could result in increased expenses or dilution to our existing stockholders.

As of September 30, 2012, we had $717.0 million in cash, cash equivalents, and marketable securities compared with $788.0 million as of December 31, 2011. The decrease in our cash, cash equivalents, and marketable securities was primarily due to (i) an increase in our inventories, BoS parts, and deferred project costs, (ii) the repayment of our German Loan Facility, (iii) the annual payments for the funding of our collection and recycling program which occurs in the first quarter of every year, and (iv) our capital expenditures, which were partially offset by the cash received from customers primarily from the sale of systems projects. As of September 30, 2012 and December 31, 2011, $429.9 million and $638.9 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.

Our expanding systems business requires liquidity and is expected to continue to have significant liquidity requirements in the future. 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 power plant, vary substantially and can take many years to complete. As a result of these long project development and construction cycles, we may make significant up-front investments in advance of the receipt of any cash flows from the sale of such systems projects. These expenditures 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 costs. Additionally, we may use our working capital or the availability under our Revolving Credit Facility to fund a portion or all of the construction of our systems projects in advance of any cash receipts from the sale of such projects. Some of the factors which may influence our decision to fund construction of a portion or all of a project in advance of selling the project include qualifying for tax incentives, complying with time specific restrictions within project permits, interconnection agreements or power purchase agreements, or benefiting from a higher sales price through eliminating any perceived construction risk for a project.

Depending upon the size and number of projects that we are developing and constructing prior to the sale of such projects, the systems business may require significant liquidity. We have historically financed these up-front investments for project development and when necessary, construction, primarily using working capital. We assess the benefits of funding construction activities in advance of a systems project being sold against our overall liquidity requirements to ensure our liquidity will remain sufficient to meet all of our working capital and capital expenditure needs. Although the size and number of systems projects under construction has increased as our systems business grows, we do not necessarily expect a corresponding increase in our funding of construction activities as such funding decisions are thoroughly evaluated based on the specific facts and circumstances related to each project.

The following significant developments in the nine months ended September 30, 2012, have impacted or are expected to impact our liquidity:

- The amount of Accounts receivable, unbilled as of September 30, 2012 was $398.9 million and represents revenues recognized on the construction of systems projects in advance of billing the customer under the terms of the underlying construction contracts. Such Accounts receivable, unbilled primarily represents construction on sold projects we have funded with working capital and such amounts are expected to be billed and collected from customers during the next twelve months. Additionally, we have $225.5 million of retainage included within Other assets, 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 are noncurrent in nature as they are expected to be billed and collected from customers beyond the next twelve months.

- The amount of finished goods inventory (“solar module inventory”) and BoS parts as of September 30, 2012 was $603.4 million and represents an 82% increase from December 31, 2011. As we continue with the construction of our 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 produce or acquire the necessary materials 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 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 inventories. As previously announced, we have reduced our manufacturing capacity and planned solar module production levels, to match expected market demand, which considers our systems project pipeline. This 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 Long Term Strategic Plan and respond to market pricing uncertainties for solar modules. Our solar module inventory as of September 30, 2012, is expected to primarily support our systems business with the remaining amounts being used to support expected near term demand for third-party module sales. As of September 30, 2012, approximately $304 million or 64% of our solar module inventory was either on-site or in-transit to our systems projects. Of this amount, approximately $69 million of solar module inventories or 15% of the total solar module inventory balance was physically segregated for certain projects for the purpose of qualifying such projects for the Department of Treasury’s Section 1603 cash grant program prior to the program’s expiration in December 2011. Such segregated solar module inventories are expected to be installed in the underlying systems projects in the normal course of our construction, which has not yet begun. All BoS parts are for our systems business projects.

•

With the announced closure by the end of 2012 of our Frankfurt (Oder) manufacturing plants and our strategy to focus our sales efforts on providing utility scale systems solutions to sustainable markets, our near term liquidity may be adversely impacted as we shift our selling efforts from the European markets, in which we have historically generated a significant portion of our net sales, to new markets, in some of which we have not historically generated any meaningful portion of our net sales. Additionally, as discussed further above, our utility scale systems solutions have in the past and may in the future require the use of our working capital and other sources of liquidity in advance of receiving any payments for the sale of such projects. The liquidity requirements for such systems projects can be greater than the working capital required for the sale of solar modules, which prior to 2011 represented the substantial majority of our net sales. We believe that the contracted portion of our systems project pipeline will provide us with sufficient liquidity and working capital to prudently execute our Long Term Strategic Plan.

- In connection with the execution of our Long Term Strategic Plan, we expect joint ventures or other business arrangements

70

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. Some of these business arrangements may involve a significant cash investment or other allocation of working capital that could reduce our liquidity or require us to pursue additional sources of financing, assuming such sources are available to us. Additionally, in order to execute our Long Term Strategic Plan in such markets, we may elect or be required to temporarily retain an ownership interest in the underlying systems projects we develop 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 charges, including the restructuring initiatives announced in April 2012, are expected to result in total cash payments of between $80 million and $120 million, of which approximately $27 million were already made as of September 30, 2012. Such cash payments are primarily related to severance costs and the repayment of government grants for our Frankfurt (Oder) plants. The cost savings expected from these restructuring initiatives in 2012 are expected to be between approximately $30 million and $50 million, substantially all reducing selling, general and administrative expenses. Annual cost savings in 2013 and beyond are expected to be approximately between $100 million and $120 million, reducing both cost of sales and selling, general and administrative expenses in approximately equal amounts. These cost savings may be offset by increases in operating expenses primarily related to establishing a localized business presence and active development of utility scale systems projects in target markets.

There is the potential for additional future restructuring actions as we continue to align our manufacturing production with market demand, evaluate potential cost savings opportunities, and focus on developing target markets. We could in the future incur additional restructuring costs (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.

- We decided not to proceed with our previously announced 4-line plant in Vietnam and are attempting to sell the plant. We expect to complete the sale of the Vietnam plant within the next year, but the expected selling price is substantially below our cost of construction. We also plan to sell our Frankfurt (Oder) plants after we stop production at the end of 2012. We do not currently have an expectation on the timing of the sale of the Frankfurt (Oder) plants, but the expected selling price is substantially below our cost of the plants prior to impairment. See Note 4. “Restructuring,” to our condensed consolidated financial statements included in this Quarterly Report on Form 10-Q.

- During the remainder of 2012, we expect to spend up to $50 million for capital expenditures, including expenditures for upgrades to existing machinery and equipment, which we believe will increase our solar module efficiencies. A majority of our remaining capital expenditures for 2012 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 repurchase 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 repurchase 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 repurchase. If we are required to repurchase a solar power project we would have the ability to market and sell such project at then current market pricing, if the event requiring a repurchase does not impact its marketability. Our liquidity may also be impacted as the time between the repurchase of a project and the potential sale of such repurchased project could take several months.

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 crisis 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 September 30, 2012, our liquidity and marketable securities and 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

The following table summarizes the key cash flow metrics for the nine months ended September 30, 2012 and September 30, 2011 (in thousands):

	Nine Months Ended	
	September 30, 2012	September 30, 2011
Net cash provided by (used in) operating activities	$434,650	$ (44,197)
Net cash used in investing activities	(344,328)	(502,163)
Net cash (used in) provided by financing activities	(84,227)	458,302
Effect of exchange rate changes on cash and cash equivalents	2,985	929
Net increase (decrease) in cash and cash equivalents	$9,080	$ (87,129)

Operating Activities

Cash provided by operating activities was $434.7 million during the nine months ended September 30, 2012 compared with cash used in operating activities of $44.2 million during the nine months ended September 30, 2011. The increase in net cash provided by operating activities during the nine months ended September 30, 2012 was primarily due to an increase in cash received from customers, which was partially offset by an increase in payments to suppliers and associates. In addition, income taxes paid, net of refunds decreased from net payments of $44.1 million during the nine months ended September 30, 2011 to a net refund of $22.4 million during the nine months ended September 30, 2012, primarily due to certain German income tax refunds received during the nine months ended September 30, 2012. Such amounts were offset by an increase in the excess tax benefits related to share-based compensation arrangements, which decreased our September 30, 2012 operating cash flow by $61.6 million compared to a $79.7 million decrease during the nine months ended September 30, 2011.

Investing Activities

Cash used in investing activities was $344.3 million during the nine months ended September 30, 2012, compared with $502.2 million during the nine months ended September 30, 2011. Cash used in investing activities during the nine months ended September 30, 2012 included capital expenditures of $339.2 million, which decreased from $613.9 million during the nine months ended September 30, 2011. The decrease in capital expenditures was primarily due to reduced capital expenditures during the nine months ended September 30, 2012 related to our previously planned manufacturing plants in Vietnam and Mesa, Arizona compared to the capital expenditures made during the nine months ended September 30, 2011 related to manufacturing plant expansions primarily in Malaysia and Germany. Also, we decreased our net investment in marketable securities by $80.0 million during the nine months ended September 30, 2012 compared with a decrease in our net investment in marketable securities of $229.1 million during the nine months ended September 30, 2011. Cash used to fund our estimated future end-of-life collection and recycling program costs of solar modules that we sold during 2011 was $80.7 million during the nine months ended September 30, 2012, compared to $62.7 million during the nine months ended September 30, 2011. On January 4, 2011, we acquired Ray Tracker, Inc., a tracking technology and photovoltaic balance of systems firm in an all-cash transaction with an initial payment of $21.1 million. During the nine months ended September 30, 2012, we made a second payment of $2.4 million under the terms of the acquisition agreement. The remaining change in cash used in investing activities was primarily driven by reduction of $20.3 million in restricted cash in the nine months ended September 30, 2012 compared to an increase of $23.4 million in restricted cash in the nine months ended September 30, 2011.

Financing Activities

Cash used in financing activities was $84.2 million during the nine months ended September 30, 2012 compared with cash provided by financing activities of $458.3 million during the nine months ended September 30, 2011. Cash used in financing activities during the nine months ended September 30, 2012 resulted primarily from the repayment of long-term debt of $173.2 million and the repayment of economic development funding of $6.8 million, partially offset by the net proceeds from our revolving credit facility of $35.0 million and excess tax benefit from share-based compensation arrangements of $61.6 million.

Cash provided by financing activities during the nine months ended September 30, 2011 resulted primarily from the proceeds of borrowings under credit facilities, net of discount and issuance costs of $694.4 million, cash provided by employee stock option exercises of $8.0 million, excess tax benefits from share-based compensation arrangements of $79.7 million, and proceeds from economic development funding of $4.3 million, partially offset by the repayments of long-term debt of $327.8 million.

Contractual Obligations

Our contractual obligations have not materially changed since the end of 2011 other than in the ordinary course of business. See also our Annual Report on Form 10-K for the year ended December 31, 2011 for additional information regarding our contractual obligations.

Off-Balance Sheet Arrangements

We had no off-balance sheet arrangements as of September 30, 2012.

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, 2011.

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 September 30, 2012 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 September 30, 2012 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 September 30, 2012 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 as reasonably likely to materially affect, our internal control over financial reporting during the quarter ended September 30, 2012.

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

General

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 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. The Court has not yet ruled on that motion.

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. The Court has not yet ruled on that motion.

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. The Court has not yet ruled on that motion.

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, 2011, 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 are not the only risks facing our 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.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

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

Exhibit Number	Exhibit Description
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

November 2, 2012