FIRST SOLAR, INC.
Form 10-Q
April 27, 2018

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 March 31, 2018
or
[ ] TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from to

Commission file number: 001-33156

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

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

350 West Washington Street, Suite 600
Tempe, Arizona 85281
(Address of principal executive offices, including zip code)

(602) 414-9300
(Registrant's telephone number, including area code)

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes [x] No [ ]

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer [x]	Accelerated filer [ ]	Non-accelerated filer [ ]
Smaller reporting company [ ]	Emerging growth company [ ]	(Do not check if a smaller reporting company)

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. [ ]

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 April 20, 2018, 104,763,203 shares of the registrant’s common stock, $0.001 par value per share, were outstanding.

Table of Contents

FIRST SOLAR, INC. AND SUBSIDIARIES

FORM 10-Q FOR THE QUARTERLY PERIOD ENDED MARCH 31, 2018

TABLE OF CONTENTS

		Page
Part I.	Financial Information	
Item 1.	Condensed Consolidated Financial Statements (Unaudited):	
	Condensed Consolidated Statements of Operations for the three months ended March 31, 2018 and 2017	1
	Condensed Consolidated Statements of Comprehensive Income for the three months ended March 31, 2018 and 2017	2
	Condensed Consolidated Balance Sheets as of March 31, 2018 and December 31, 2017	3
	Condensed Consolidated Statements of Cash Flows for the three months ended March 31, 2018 and 2017	4
	Notes to Condensed Consolidated Financial Statements	5
Item 2.	Management's Discussion and Analysis of Financial Condition and Results of Operations	43
Item 3.	Quantitative and Qualitative Disclosures About Market Risk	61
Item 4.	Controls and Procedures	61
Part II.	Other Information	62
Item 1.	Legal Proceedings	62
Item 1A.	Risk Factors	62
Item 5.	Other Information	63
Item 6.	Exhibits	63
Signature		64

Table of Contents

PART I. FINANCIAL INFORMATION

Item 1. Condensed Consolidated Financial Statements (Unaudited)

FIRST SOLAR, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(In thousands, except per share amounts)
(Unaudited)

	Three Months Ended March 31,	
	2018	2017
Net sales	$567,265	$891,791
Cost of sales	394,467	807,607
Gross profit	172,798	84,184
Operating expenses:		
Selling, general and administrative	41,126	48,199
Research and development	20,324	22,799
Production start-up	37,084	1,150
Restructuring and asset impairments	—	20,031
Total operating expenses	98,534	92,179
Operating income (loss)	74,264	(7,995)
Foreign currency (loss) gain, net	(2,517)	246
Interest income	11,824	6,417
Interest expense, net	(5,182)	(9,169)
Other income, net	17,934	25,861
Income before taxes and equity in earnings	96,323	15,360
Income tax expense	(11,625)	(5,679)
Equity in earnings, net of tax	(1,747)	(552)
Net income	$82,951	$9,129
Net income per share:		
Basic	$0.79	$0.09
Diluted	$0.78	$0.09
Weighted-average number of shares used in per share calculations:		
Basic	104,550	104,103
Diluted	106,305	104,410

See accompanying notes to these condensed consolidated financial statements.

Table of Contents

FIRST SOLAR, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In thousands)
(Unaudited)

	Three Months Ended March 31,	
	2018	2017
Net income	$82,951	$9,129
Other comprehensive loss:		
Foreign currency translation adjustments	6,014	4,641
Unrealized loss on marketable securities and restricted investments, net of tax of $3,110 and $116	(25,924)	(4,790)
Unrealized loss on derivative instruments, net of tax of $(64) and $813	(932)	(2,154)
Other comprehensive loss	(20,842)	(2,303)
Comprehensive income	$62,109	$6,826

See accompanying notes to these condensed consolidated financial statements.

Table of Contents

FIRST SOLAR, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except share data)
(Unaudited)

	March 31, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	$1,858,338	$ 2,268,534
Marketable securities	1,020,136	720,379
Accounts receivable trade, net	273,277	211,797
Accounts receivable, unbilled and retainage	151,393	174,608
Inventories	174,070	172,370
Balance of systems parts	65,374	28,840
Project assets	10,094	77,931
Notes receivable, affiliate	20,411	20,411
Prepaid expenses and other current assets	197,206	157,902
Total current assets	3,770,299	3,832,772
Property, plant and equipment, net	1,311,642	1,154,537
PV solar power systems, net	355,143	417,108
Project assets	430,678	424,786
Deferred tax assets, net	64,427	51,417
Restricted cash and investments	354,082	424,783
Equity method investments	200,955	217,230
Goodwill	14,462	14,462
Intangibles assets, net	79,607	80,227
Inventories	116,397	113,277
Note receivable, affiliate	47,798	48,370
Other assets	94,699	85,532
Total assets	$6,840,189	$ 6,864,501
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$136,897	$ 120,220
Income taxes payable	10,164	19,581
Accrued expenses	297,446	366,827
Current portion of long-term debt	6,062	13,075
Deferred revenue	67,336	81,816
Other current liabilities	35,833	48,757
Total current liabilities	553,738	650,276
Accrued solar module collection and recycling liability	170,352	166,609
Long-term debt	431,817	380,465
Other liabilities	524,911	568,454
Total liabilities	1,680,818	1,765,804
Commitments and contingencies		
Stockholders' equity:		
Common stock, $0.001 par value per share; 500,000,000 shares authorized; 104,762,691 and 104,468,460 shares issued and outstanding at March 31, 2018 and December 31, 2017, respectively	105	104
Additional paid-in capital	2,797,671	2,799,107

Accumulated earnings	2,380,178	2,297,227
Accumulated other comprehensive (loss) income	(18,583)	2,259
Total stockholders' equity	5,159,371	5,098,697
Total liabilities and stockholders' equity	$6,840,189	$6,864,501

See accompanying notes to these condensed consolidated financial statements.

Table of Contents

FIRST SOLAR, INC. AND SUBSIDIARIES
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Three Months Ended March 31,	
	2018	2017
Cash flows from operating activities:		
Net income	$82,951	$9,129
Adjustments to reconcile net income to cash provided by operating activities:		
Depreciation, amortization and accretion	24,419	32,968
Impairments and net losses on disposal of long-lived assets	1,047	15,011
Share-based compensation	8,652	7,051
Equity in earnings, net of tax	1,747	552
Remeasurement of monetary assets and liabilities	(1,458)	(2,558)
Deferred income taxes	(5,567)	4,494
Gain on sales of marketable securities and restricted investments	(19,470)	(46)
Liabilities assumed by customers for the sale of systems	(60,307)	—
Other, net	6,097	5,537
Changes in operating assets and liabilities:		
Accounts receivable, trade, unbilled and retainage	(37,633)	252,244
Prepaid expenses and other current assets	(60,539)	34,441
Inventories and balance of systems parts	(40,624)	(38,131)
Project assets and PV solar power systems	131,342	506,078
Other assets	(8,260)	(6,985)
Income tax receivable and payable	12,208	(2,308)
Accounts payable	1,909	(3,013)
Accrued expenses and other liabilities	(84,832)	(323,694)
Accrued solar module collection and recycling liability	3,032	2,374
Net cash (used in) provided by operating activities	(45,286)	493,144
Cash flows from investing activities:		
Purchases of property, plant and equipment	(177,725)	(112,993)
Purchases of marketable securities and restricted investments	(366,429)	(359,283)
Proceeds from sales and maturities of marketable securities and restricted investments	167,134	177,678
Proceeds from sales of equity method investments	7,559	—
Other investing activities	(5,228)	1,408
Net cash used in investing activities	(374,689)	(293,190)
Cash flows from financing activities		
Repayment of long-term debt	(11,282)	(22,048)
Proceeds from borrowings under long-term debt, net of discounts and issuance costs	65,309	94,670
Payments of tax withholdings for restricted shares	(10,137)	(4,167)
Proceeds from commercial letters of credit	—	43,025
Contingent consideration payments and other financing activities	(1,734)	(9,316)
Net cash provided by financing activities	42,156	102,164
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(5,074)	(7,307)
Net (decrease) increase in cash, cash equivalents and restricted cash	(382,893)	294,811
Cash, cash equivalents and restricted cash, beginning of the period	2,330,476	1,415,690
Cash, cash equivalents and restricted cash, end of the period	$1,947,583	$1,710,501
Supplemental disclosure of noncash investing and financing activities:		

Property, plant and equipment acquisitions funded by liabilities	$162,812	$21,498
Acquisitions currently or previously funded by liabilities and contingent consideration	$9,133	$21,610
Accrued interest capitalized to long-term debt	$786	$13,589

See accompanying notes to these condensed consolidated financial statements.

Table of Contents

FIRST SOLAR, INC. AND SUBSIDIARIES

NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Basis of Presentation

The accompanying unaudited condensed consolidated financial statements of First Solar, Inc. and its subsidiaries in this Quarterly Report have been prepared in accordance with generally accepted accounting principles in the United States of America ("U.S. GAAP") for interim financial information and pursuant to the instructions to Form 10-Q and Article 10 of Regulation S-X of the Securities and Exchange Commission (the "SEC"). Accordingly, these interim financial statements do not include all of the information and footnotes required by U.S. GAAP for annual financial statements. In the opinion of First Solar management, all adjustments (consisting only of normal recurring adjustments) considered necessary for a fair statement have been included. Certain prior year balances have been reclassified to conform to the current year presentation.

The preparation of condensed consolidated financial statements in conformity with U.S. GAAP requires us to make estimates and assumptions that affect the amounts reported in our condensed consolidated financial statements and the accompanying notes. Despite our intention to establish accurate estimates and reasonable assumptions, actual results could differ materially from such estimates and assumptions. Operating results for the three months ended March 31, 2018 are not necessarily indicative of the results that may be expected for the year ending December 31, 2018 or for any other period. The condensed consolidated balance sheet at December 31, 2017 has been derived from the audited consolidated financial statements at that date, but does not include all of the information and footnotes required by U.S. GAAP for complete financial statements. These interim financial statements and notes should be read in conjunction with the audited financial statements and notes thereto for the year ended December 31, 2017 included in our Annual Report on Form 10-K, which has been filed with the SEC.

Unless expressly stated or the context otherwise requires, the terms "the Company," "we," "us," "our," and "First Solar" refer t
First Solar, Inc. and its subsidiaries, and the term "condensed consolidated financial statements" refers to the accompanying unaudited condensed and consolidated financial statements contained in this Quarterly Report.

2. Recent Accounting Pronouncements

In February 2018, the Financial Accounting Standard Board ("FASB") issued ASU 2018-02, Income Statement – Reporting Comprehensive Income (Topic 220) – Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income, to allow entities to reclassify the income tax effects of tax reform legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act") on items within accumulated other comprehensive income to retained earnings. ASU 2018-02 is effective for fiscal years and interim periods within those years beginning after December 15, 2018, and early adoption is permitted. We are currently evaluating the impact ASU 2018-02 will have on our consolidated financial statements and associated disclosures.

In August 2017, the FASB issued ASU 2017-12, Derivatives and Hedging (Topic 815) – Targeted Improvements to Accounting for Hedging Activities, to simplify certain aspects of hedge accounting for both non-financial and financial risks and better align the recognition and measurement of hedge results with an entity's risk management activities. ASU 2017-12 also amends certain presentation and disclosure requirements for hedging activities and changes how an entity assesses hedge effectiveness. ASU 2017-12 is effective for fiscal years and interim periods within those years beginning after December 15, 2018, and early adoption is permitted. We are currently evaluating the impact ASU 2017-12 will have on our consolidated financial statements and associated disclosures.

5

Table of Contents

In October 2016, the FASB issued ASU 2016-16, Income Taxes (Topic 230) – Intra-Entity Transfers of Assets Other Than Inventory. ASU 2016-16 requires the recognition of income tax consequences of intra-entity transfers of assets, other than inventory, when the transfer occurs. Two common examples of assets included in the scope of ASU 2016-16 are intellectual property and long-lived assets. The adoption of ASU 2016-16 in the first quarter of 2018 did not have a significant impact on our consolidated financial statements and associated disclosures.

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

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

3. Restructuring and Asset Impairments

Cadmium Telluride Module Manufacturing and Corporate Restructuring

In November 2016, our board of directors approved a set of initiatives intended to accelerate our transition to Series 6 module manufacturing and restructure our operations to reduce costs and better align the organization with our long-term strategic plans. Accordingly, we expect to upgrade and replace our legacy manufacturing fleet over the next several years with Series 6 manufacturing equipment, thereby enabling the production of solar modules with a larger form factor, better product attributes, and a lower cost structure.

As part of these initiatives, we incurred net charges of $20.0 million during the three months ended March 31, 2017, which included (i) $10.2 million of charges, primarily related to net losses on the disposition of previously impaired Series 4 and Series 5 manufacturing equipment, (ii) $6.2 million of severance benefits to terminated employees, and (iii) $3.6 million of net miscellaneous charges, primarily related to contract terminations, the write-off of operating supplies, and other Series 4 manufacturing exit costs. Substantially all amounts associated with these restructuring and asset impairment charges related to our modules segment and were classified as “Restructuring and asset impairments” on our condensed consolidated statements of operations, and substantially all of the associated liabilities were paid or settled as of December 31, 2017.

Table of Contents

4. Cash, Cash Equivalents, and Marketable Securities

We consider highly liquid investments with original maturities of three months or less at the time of purchase to be cash equivalents with the exception of time deposits, which are presented as marketable securities. Cash, cash equivalents, and marketable securities consisted of the following at March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018	December 31, 2017
Cash and cash equivalents:		
Cash	$1,732,289	$ 2,142,949
Money market funds	126,049	125,585
Total cash and cash equivalents	1,858,338	2,268,534
Marketable securities:		
Foreign debt	293,939	238,858
Foreign government obligations	117,699	152,850
U.S. debt	53,498	73,671
Time deposits	555,000	255,000
Total marketable securities	1,020,136	720,379
Total cash, cash equivalents, and marketable securities	$2,878,474	$ 2,988,913

During the three months ended March 31, 2017, we sold marketable securities for proceeds of $103.2 million and realized gains of less than $0.1 million on such sales. See Note 8. “Fair Value Measurements” to our condensed consolidated financial statements for information about the fair value of our marketable securities.

The following tables summarize the unrealized gains and losses related to our available-for-sale marketable securities, by major security type, as of March 31, 2018 and December 31, 2017 (in thousands):

	As of March 31, 2018			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Foreign debt	$296,454	$ 97	$ 2,612	$293,939
Foreign government obligations	118,994	—	1,295	117,699
U.S. debt	53,591	—	93	53,498
Time deposits	555,000	—	—	555,000
Total	$1,024,039	$ 97	$ 4,000	$1,020,136
	As of December 31, 2017			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Foreign debt	$240,643	$ 3	$ 1,788	$238,858
Foreign government obligations	153,999	—	1,149	152,850
U.S. debt	73,746	—	75	73,671
Time deposits	255,000	—	—	255,000
Total	$723,388	$ 3	$ 3,012	$720,379

Table of Contents

As of March 31, 2018, we identified 12 investments totaling $170.4 million that had been in a loss position for a period of time greater than 12 months with unrealized losses of $1.8 million. As of December 31, 2017, we identified 16 investments totaling $210.3 million that had been in a loss position for a period of time greater than 12 months with unrealized losses of $1.9 million. Such unrealized losses were primarily due to increases in interest rates relative to rates at the time of purchase. Based on the underlying credit quality of the investments, we do not intend to sell these securities prior to the recovery of our cost basis. Therefore, we did not consider these securities to be other-than-temporarily impaired.

The following tables show unrealized losses and fair values for those marketable securities that were in an unrealized loss position as of March 31, 2018 and December 31, 2017, aggregated by major security type and the length of time the marketable securities have been in a continuous loss position (in thousands):

	As of March 31, 2018					
	In Loss Position for Less Than 12 Months		In Loss Position for 12 Months or Greater		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Foreign debt	$164,816	$ 1,633	$83,972	$ 980	$248,788	$ 2,613
Foreign government obligations	31,300	461	86,398	833	117,698	1,294
U.S. debt	53,498	93	—	—	53,498	93
Total	$249,614	$ 2,187	$170,370	$ 1,813	$419,984	$ 4,000

	As of December 31, 2017					
	In Loss Position for Less Than 12 Months		In Loss Position for 12 Months or Greater		Total	
	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Foreign debt	$119,869	$ 735	$88,919	$ 1,053	$208,788	$ 1,788
Foreign government obligations	31,467	289	121,383	860	152,850	1,149
U.S. debt	73,671	75	—	—	73,671	75
Total	$225,007	$ 1,099	$210,302	$ 1,913	$435,309	$ 3,012

The contractual maturities of our marketable securities as of March 31, 2018 were as follows (in thousands):

	Fair Value
One year or less	$713,613
One year to two years	164,764
Two years to three years	141,759
Total	$1,020,136

Table of Contents

5. Restricted Cash and Investments

Restricted cash and investments consisted of the following at March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018	December 31, 2017
Restricted cash	$84,147	$ 50,822
Restricted investments	269,935	373,961
Total restricted cash and investments (1)	$354,082	$ 424,783

(1) There was an additional $5.1 million and $11.1 million of restricted cash included within “Prepaid expenses and other current assets” at March 31, 2018 and December 31, 2017, respectively.

At March 31, 2018 and December 31, 2017, our restricted cash consisted of deposits held by various banks to secure certain of our letters of credit and other deposits designated for the construction or operation of systems projects as well as the payment of amounts related to project specific debt financings. See Note 11. “Commitments and Contingencies” to our condensed consolidated financial statements for further discussion related to our letters of credit.

At March 31, 2018 and December 31, 2017, our restricted investments consisted of long-term marketable securities that were held in custodial accounts to fund the estimated future costs of collecting and recycling modules covered under our solar module collection and recycling program. As necessary, we fund any incremental amounts for our estimated collection and recycling obligations within 90 days of the end of each year. We determine the funding requirement, if any, based on estimated costs of collecting and recycling covered modules, estimated rates of return on our restricted investments, and an estimated solar module life of 25 years less amounts already funded in prior years. No incremental funding was required in 2018 as substantially all of our module sales in the prior year were not covered under our solar module collection and recycling program. To ensure that amounts previously funded will be available in the future regardless of potential adverse changes in our financial condition (even in the case of our own insolvency), we have established a trust under which estimated funds are put into custodial accounts with an established and reputable bank, for which First Solar, Inc.; First Solar Malaysia Sdn. Bhd.; and First Solar Manufacturing GmbH are grantors. Trust funds may be disbursed for qualified module collection and recycling costs (including capital and facilities related recycling costs), payments to customers for assuming collection and recycling obligations, and reimbursements of any overfunded amounts. Investments in the trust must meet certain investment quality criteria comparable to highly rated government or agency bonds.

During the three months ended March 31, 2018, we sold certain restricted investments for proceeds of $101.6 million, realized gains of $19.5 million on such sales, and withdrew the funds from the trust as a reimbursement of overfunded amounts. See Note 8. “Fair Value Measurements” to our condensed consolidated financial statements for information about the fair value of our restricted investments.

The following tables summarize the unrealized gains and losses related to our restricted investments, by major security type, as of March 31, 2018 and December 31, 2017 (in thousands):

	As of March 31, 2018			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Foreign government obligations	$109,981	$ 52,488	$ —	$162,469
U.S. government obligations	115,244	410	8,188	107,466
Total	$225,225	$ 52,898	$ 8,188	$269,935

9

Table of Contents

	As of December 31, 2017			
	Amortized Cost	Unrealized Gains	Unrealized Losses	Fair Value
Foreign government obligations	$127,436	$ 62,483	$ —	$189,919
U.S. government obligations	174,624	12,944	3,526	184,042
Total	$302,060	$ 75,427	$ 3,526	$373,961

As of March 31, 2018, we identified six restricted investments totaling $103.8 million that had been in a loss position for a period of time greater than 12 months with unrealized losses of $8.2 million. As of December 31, 2017, we identified six restricted investments totaling $107.7 million that had been in a loss position for a period of time greater than 12 months with unrealized losses of $3.5 million. The unrealized losses were primarily due to increases in interest rates relative to rates at the time of purchase. Based on the underlying credit quality of the investments, we do not intend to sell these securities prior to the recovery of our cost basis. Therefore, we did not consider these investments to be other-than-temporarily impaired.

As of March 31, 2018, the contractual maturities of our restricted investments were between 12 years and 19 years.

6. Consolidated Balance Sheet Details

Accounts receivable trade, net

Accounts receivable trade, net consisted of the following at March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018	December 31, 2017
Accounts receivable trade, gross	$275,604	$ 213,776
Allowance for doubtful accounts	(2,327)	(1,979)
Accounts receivable trade, net	$273,277	$ 211,797

At March 31, 2018 and December 31, 2017, $8.1 million and $16.8 million, respectively, of our accounts receivable trade, net were secured by letters of credit, bank guarantees, or other forms of financial security issued by creditworthy financial institutions.

Accounts receivable, unbilled and retainage

Accounts receivable, unbilled and retainage consisted of the following at March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018	December 31, 2017
Accounts receivable, unbilled	$149,806	$ 172,594
Retainage	1,587	2,014
Accounts receivable, unbilled and retainage	$151,393	$ 174,608

Table of Contents

Inventories

Inventories consisted of the following at March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018	December 31, 2017
Raw materials	$168,399	$ 148,968
Work in process	17,085	14,085
Finished goods	104,983	122,594
Inventories	$290,467	$ 285,647
Inventories – current	$174,070	$ 172,370
Inventories – noncurrent	$116,397	$ 113,277

Prepaid expenses and other current assets

Prepaid expenses and other current assets consisted of the following at March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018	December 31, 2017
Prepaid expenses	$52,770	$ 41,447
Prepaid income taxes	12,686	31,944
Value added tax receivables	9,538	12,232
Restricted cash	5,098	11,120
Derivative instruments	3,330	4,303
Other current assets	113,784	56,856
Prepaid expenses and other current assets	$197,206	$ 157,902

Property, plant and equipment, net

Property, plant and equipment, net consisted of the following at March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018	December 31, 2017
Land	$8,254	$8,181
Buildings and improvements	438,549	424,266
Machinery and equipment	1,229,854	1,059,103
Office equipment and furniture	166,687	157,512
Leasehold improvements	49,105	48,951
Construction in progress	622,625	641,263
Property, plant and equipment, gross	2,515,074	2,339,276
Accumulated depreciation	(1,203,432)	(1,184,739)
Property, plant and equipment, net	$1,311,642	$1,154,537

Depreciation of property, plant and equipment was $18.6 million and $26.9 million for the three months ended March 31, 2018 and 2017, respectively.

Table of Contents

PV solar power systems, net

Photovoltaic ("PV") solar power systems, consisted of the following at March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018	December 31, 2017
PV solar power systems, gross	$387,459	$ 451,045
Accumulated depreciation	(32,316)	(33,937)
PV solar power systems, net	$355,143	$ 417,108

Depreciation of PV solar power systems was $4.3 million and $5.1 million for the three months ended March 31, 2018 and 2017, respectively.

Capitalized interest

The cost of constructing project assets includes interest costs incurred during the construction period. The components of interest expense and capitalized interest were as follows during the three months ended March 31, 2018 and 2017 (in thousands):

	Three Months Ended March 31,	
	2018	2017
Interest cost incurred	$(6,465)	$(9,270)
Interest cost capitalized – project assets	1,283	101
Interest expense, net	$(5,182)	$(9,169)

Project assets

Project assets consisted of the following at March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018	December 31, 2017
Project assets – development costs, including project acquisition and land costs	$196,569	$ 250,590
Project assets – construction costs	244,203	252,127
Project assets	$440,772	$ 502,717
Project assets – current	$10,094	$ 77,931
Project assets – noncurrent	$430,678	$ 424,786

Table of Contents

Other assets

Other assets consisted of the following at March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018	December 31, 2017
Deferred rent	$ 26,627	$ 26,760
Notes receivable (1)	10,410	10,495
Income taxes receivable	4,470	4,454
Other	53,192	43,823
Other assets	$ 94,699	$ 85,532

(1) In April 2009, we entered into a credit facility agreement with a solar power project entity of one of our customers for an available amount of €17.5 million to provide financing for a PV solar power system. The credit facility bears interest at 8.0% per annum, payable quarterly, with the full amount due in December 2026. As of March 31, 2018 and December 31, 2017, the balance outstanding on the credit facility was €7.0 million ($8.6 million and $8.4 million, respectively).

Goodwill

Goodwill for the relevant reporting unit consisted of the following at March 31, 2018 and December 31, 2017 (in thousands):

	December 31, 2017	Acquisitions (Impairments)	March 31, 2018
Modules	$ 407,827	$ —	$ 407,827
Accumulated impairment losses	(393,365)	—	(393,365)
Goodwill	$ 14,462	$ —	$ 14,462

Intangibles assets, net

Intangibles assets, net primarily include developed technologies or IPR&D from prior business acquisitions, certain power purchase agreements ("PPAs") acquired after the associated PV solar power systems were placed in service, and our internally-generated intangible assets, substantially all of which were patents on technologies related to our products and production processes. We record an asset for patents, after the patent has been issued, based on the legal, filing, and other costs incurred to secure them. We amortize intangible assets on a straight-line basis over their estimated useful lives once the intangible assets meet the criteria to be amortized.

The following tables summarize our intangible assets at March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018		
	Gross Amount	Accumulated Amortization	Net Amount
Developed technology	$ 78,709	$ (25,984)	$ 52,725
Power purchase agreements	6,486	(405)	6,081
Patents	7,068	(3,522)	3,546
In-process research and development	17,255	—	17,255
Intangibles assets, net	$ 109,518	$ (29,911)	$ 79,607

Table of Contents

	December 31, 2017		
	Gross Amount	Accumulated Amortization	Net Amount
Developed technology	$76,959	$ (24,140)	$52,819
Power purchase agreements	6,486	(324)	6,162
Patents	7,068	(3,077)	3,991
In-process research and development	17,255	—	17,255
Intangibles assets, net	$107,768	$ (27,541)	$80,227

Amortization expense for our intangible assets was $2.4 million and $2.1 million for the three months ended March 31, 2018 and 2017, respectively.

Accrued expenses

Accrued expenses consisted of the following at March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018	December 31, 2017
Accrued property, plant and equipment	$116,116	$ 133,433
Accrued project assets	37,867	55,834
Accrued inventory	35,163	24,830
Product warranty liability (1)	32,655	28,767
Accrued compensation and benefits	27,524	73,985
Other	48,121	49,978
Accrued expenses	$297,446	$ 366,827

(1) See Note 11. “Commitments and Contingencies” to our condensed consolidated financial statements for discussion of our “Product warranty liability.”

Other current liabilities

Other current liabilities consisted of the following at March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018	December 31, 2017
Derivative instruments	$ 16,359	$ 27,297
Contingent consideration (1)	5,980	6,162
Financing liability (2)	5,145	5,161
Indemnification liabilities (1)	—	2,876
Other	8,349	7,261
Other current liabilities	$ 35,833	$ 48,757

(1) See Note 11. “Commitments and Contingencies” to our condensed consolidated financial statements for discussion of our “Contingent consideration” and “Indemnification liabilities” arrangements.

(2) See Note 9. “Equity Method Investments” to our condensed consolidated financial statements for discussion of the financing liabilities associated with our leaseback of the Maryland Solar project.

14

Table of Contents

Other liabilities

Other liabilities consisted of the following at March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018	December 31, 2017
Product warranty liability (1)	$193,145	$ 195,507
Transition tax liability (2)	93,233	93,233
Other taxes payable	91,591	89,724
Deferred revenue	62,535	63,257
Financing liability (3)	28,652	29,822
Derivative instruments	6,532	5,932
Contingent consideration (1)	3,153	3,153
Commercial letter of credit liability (1)	—	43,396
Other	46,070	44,430
Other liabilities	$524,911	$ 568,454

(1) See Note 11. “Commitments and Contingencies” to our condensed consolidated financial statements for discussion of our “Product warranty liability,” “Contingent consideration,” and “Commercial letter of credit liability” arrangements.

(2) See Note 14. “Income Taxes” to our condensed consolidated financial statements for discussion of the one-time transition tax on accumulated earnings of foreign subsidiaries as a result of Tax Act.

(3) See Note 9. “Equity Method Investments” to our condensed consolidated financial statements for discussion of the financing liabilities associated with our leaseback of the Maryland Solar project.

7. Derivative Financial Instruments

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

Depending on the terms of the specific derivative instruments and market conditions, some of our derivative instruments may be assets and others liabilities at any particular balance sheet date. We report all of our derivative instruments at fair value and account for changes in the fair value of derivative instruments within “Accumulated other comprehensive (loss) income” if the derivative instruments qualify for hedge accounting. For those derivative instruments that do not qualify for hedge accounting (“economic hedges”), we record the changes in fair value directly to earnings. See Note 8. “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.

Table of Contents

The following tables present the fair values of derivative instruments included in our condensed consolidated balance sheets as of March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018		
	Prepaid Expenses and Other Current Assets	Other Current Liabilities	Other Liabilities
Derivatives designated as hedging instruments:			
Foreign exchange forward contracts	$586	$ 13,518	$ —
Total derivatives designated as hedging instruments	$586	$ 13,518	$ —
Derivatives not designated as hedging instruments:			
Foreign exchange forward contracts	$2,744	$ 2,786	$ —
Interest rate swap contracts	—	55	6,532
Total derivatives not designated as hedging instruments	$2,744	$ 2,841	$ 6,532
Total derivative instruments	$3,330	$ 16,359	$ 6,532

	December 31, 2017		
	Prepaid Expenses and Other Current Assets	Other Current Liabilities	Other Liabilities
Derivatives designated as hedging instruments:			
Foreign exchange forward contracts	$252	$ 13,240	$ —
Total derivatives designated as hedging instruments	$252	$ 13,240	$ —
Derivatives not designated as hedging instruments:			
Foreign exchange forward contracts	$4,051	$ 14,057	$ —
Interest rate swap contracts	—	—	5,932
Total derivatives not designated as hedging instruments	$4,051	$ 14,057	$ 5,932
Total derivative instruments	$4,303	$ 27,297	$ 5,932

The following table presents the pretax amounts related to derivative instruments designated as cash flow hedges affecting accumulated other comprehensive income or loss and our condensed consolidated statements of operations for the three months ended March 31, 2018 and 2017 (in thousands):

	Foreign Exchange Forward Contracts
Balance in accumulated other comprehensive (loss) income at December 31, 2017	$ (1,723)
Amounts recognized in other comprehensive (loss) income	(868)
Balance in accumulated other comprehensive (loss) income at March 31, 2018	$ (2,591)
Balance in accumulated other comprehensive (loss) income at December 31, 2016	$ 2,556
Amounts recognized in other comprehensive (loss) income	(2,967)
Balance in accumulated other comprehensive (loss) income at March 31, 2017	$ (411)

We recorded no amounts related to ineffective portions of our derivative instruments designated as cash flow hedges during the three months ended March 31, 2018 and 2017. During the three months ended March 31, 2018 and 2017, we recognized unrealized losses of $0.2 million and $0.1 million, respectively, within “Other income, net” related to amounts excluded from effectiveness testing for our foreign exchange forward contracts designated as cash flow hedges.

Table of Contents

The following table presents losses related to derivative instruments not designated as hedges affecting our condensed consolidated statements of operations for the three months ended March 31, 2018 and 2017 (in thousands):

		Three Months Ended March 31,	
	Income Statement Line Item	2018	2017
Foreign exchange forward contracts	Foreign currency (loss) gain, net	$(12,656)	$(20,159)
Interest rate swap contracts	Interest expense, net	(660)	(4,676)

Interest Rate Risk

We use 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.

In March 2017, Manildra Finco Pty Ltd, our indirect wholly-owned subsidiary and project financing company, entered into various interest rate swap contracts to hedge a portion of the floating rate construction loan facility under the associated project's Manildra Credit Facility (as defined in Note 10. "Debt" to our condensed consolidated financial statements). Such swaps had an initial aggregate notional value of AUD 12.8 million and entitled the project to receive a one-month or three-month floating Bank Bill Swap or "BBSW" interest rate while requiring the project to pay a fixed rate of 3.13%. The aggregate notional amount of the interest rate swap contracts proportionately adjusts with the scheduled draws and principal payments on the underlying hedged debt. As of March 31, 2018 and December 31, 2017, the aggregate notional value of the interest rate swap contracts was AUD 68.1 million ($52.3 million and $53.2 million respectively). These derivative instruments do not qualify for accounting as cash flow hedges in accordance with Accounting Standards Codification ("ASC") 815 due to our expectation to sell the associated project before the maturity of its project specific debt financing and corresponding swap contracts. Accordingly, the changes in the fair value of the swap contracts are recorded directly to "Interest expense, net."

In January 2017, FS Japan Project 12 GK, our indirect wholly-owned subsidiary and project company, entered into an interest rate swap contract to hedge a portion of the floating rate senior loan facility under the project's Ishikawa Credit Agreement (as defined in Note 10. "Debt" to our condensed consolidated financial statements). Such swap had an initial notional value of ¥5.7 billion and entitled the project to receive a six-month floating Tokyo Interbank Offered Rate ("TIBOR") plus 0.75% interest rate while requiring the project to pay a fixed rate of 1.482%. The notional amount of the interest rate swap contract proportionately adjusts with the scheduled draws and principal payments on the underlying hedged debt. As of March 31, 2018 and December 31, 2017, the notional value of the interest rate swap contract was ¥12.8 billion ($119.9 million and $113.4 million respectively). This derivative instrument does not qualify for accounting as a cash flow hedge in accordance with ASC 815 due to our expectation to sell the associated project before the maturity of its project specific debt financing and corresponding swap contract. Accordingly, the changes in the fair value of the swap contract are recorded directly to "Interest expense, net."

Foreign Currency Risk

Cash Flow Exposure

We expect certain of our subsidiaries to have future cash flows that will be denominated in currencies other than the subsidiaries' functional currencies. Changes in the exchange rates between the functional currencies of our subsidiaries and the other currencies in which they transact will cause fluctuations in the cash flows we expect to receive or pay when these cash flows are realized or settled. Accordingly, we enter into foreign exchange forward contracts to hedge a portion of these forecasted cash flows. As of March 31, 2018 and December 31, 2017, these foreign exchange forward contracts hedged our forecasted cash flows for periods up to 6 months and 9 months, respectively. These foreign exchange forward contracts qualify for accounting as cash flow hedges in accordance with ASC 815, and we

designated them as such. We initially report the effective portion of a derivative's unrealized gain or loss in "Accumulated other comprehensive (loss) income" and subsequently reclassify amounts into earnings when the hedged transaction occurs and impacts earnings. We determined that these derivative financial instruments were highly effective as cash flow

Table of Contents

hedges as of March 31, 2018 and December 31, 2017. As of March 31, 2018 and December 31, 2017, the notional values associated with our foreign exchange forward contracts qualifying as cash flow hedges were as follows (notional amounts and U.S. dollar equivalents in millions):

	March 31, 2018	
Currency	Notional Amount	USD Equivalent
Indian rupee	INR 4,730.0	$72.6
Euro	€10.2	$12.5
Australian dollar	AUD 51.5	$39.5

	December 31, 2017	
Currency	Notional Amount	USD Equivalent
Indian rupee	INR 4,730.0	$74.1
Euro	€15.7	$18.8

In the following 12 months, we expect to reclassify to earnings $2.6 million of net unrealized losses related to these forward contracts that are included in “Accumulated other comprehensive (loss) income” at March 31, 2018 as we realize the earnings effects of the related forecasted transactions. The amount we ultimately record to earnings will depend on the actual exchange rates when we realize the related forecasted transactions.

Transaction Exposure and Economic Hedging

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

We also enter into foreign exchange forward contracts to economically hedge balance sheet and other exposures related to transactions between certain of our subsidiaries and transactions with third parties. Such contracts are considered economic hedges and do not qualify for hedge accounting. Accordingly, we recognize gains or losses from the fluctuations in foreign exchange rates and the fair value of these derivative contracts in “Foreign currency (loss) gain, net” on our condensed consolidated statements of operations. These contracts mature at various dates within the next 3 months.

Table of Contents

As of March 31, 2018 and December 31, 2017, the notional values of our foreign exchange forward contracts that do not qualify for hedge accounting were as follows (notional amounts and U.S. dollar equivalents in millions):

	March 31, 2018		
Transaction	Currency	Notional Amount	USD Equivalent
Purchase	Euro	€185.7	$228.4
Sell	Euro	€198.7	$244.4
Purchase	Australian dollar	AUD 29.8	$22.9
Sell	Australian dollar	AUD 27.9	$21.4
Purchase	Malaysian ringgit	MYR 39.7	$10.3
Sell	Malaysian ringgit	MYR 90.7	$23.4
Sell	Canadian dollar	CAD 2.9	$2.3
Purchase	Chilean peso	CLP 6,615.7	$10.9
Sell	Chilean peso	CLP 7,917.4	$13.1
Purchase	Chinese yuan	CNY 28.1	$4.5
Purchase	Japanese yen	¥571.0	$5.4
Sell	Japanese yen	¥21,130.0	$198.5
Sell	Indian rupee	INR 5,641.7	$86.6
Purchase	Singapore dollar	SGD 5.4	$4.1
Sell	Mexican peso	MXN 37.3	$2.1
Purchase	South African rand	ZAR 10.8	$0.9
Sell	South African rand	ZAR 52.7	$4.5

	December 31, 2017		
Transaction	Currency	Notional Amount	USD Equivalent
Purchase	Euro	€151.4	$181.6
Sell	Euro	€193.2	$231.7
Purchase	Australian dollar	AUD 12.7	$9.9
Sell	Australian dollar	AUD 56.8	$44.4
Purchase	Malaysian ringgit	MYR 31.0	$7.7
Sell	Malaysian ringgit	MYR 336.5	$83.1
Sell	Canadian dollar	CAD 1.7	$1.4
Sell	Chilean peso	CLP 10,180.9	$16.6
Purchase	Chinese yuan	CNY 13.8	$2.1
Sell	Japanese yen	¥23,922.2	$212.6
Purchase	Indian rupee	INR 645.7	$10.1
Sell	Indian rupee	INR 8,376.0	$131.1
Sell	Singapore dollar	SGD 3.1	$2.3
Purchase	South African rand	ZAR 12.5	$1.0
Sell	South African rand	ZAR 61.1	$5.0

Table of Contents

8. Fair Value Measurements

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

- Cash Equivalents. At March 31, 2018 and December 31, 2017, our cash equivalents consisted of money market funds. 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 March 31, 2018 and December 31, 2017, our marketable securities consisted of foreign debt, foreign government obligations, U.S. debt, and time deposits, and our restricted investments consisted of foreign and U.S. government obligations. We value our marketable securities and restricted investments using observable inputs that reflect quoted prices for securities with identical characteristics or 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 either Level 1 or Level 2 depending on the inputs used. We also consider the effect of our counterparties' credit standing in these fair value measurements.

- Derivative Assets and Liabilities. At March 31, 2018 and December 31, 2017, our derivative assets and liabilities consisted of foreign exchange forward contracts involving major currencies and interest rate swap contracts involving major interest rates. Since our derivative assets and liabilities are not traded on an exchange, we value them using standard industry valuation models. As applicable, these models project future cash flows and discount the 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 the valuation techniques as Level 2. In evaluating credit risk, we consider the effect of our counterparties' and our own credit standing in the fair value measurements of our derivative assets and liabilities, respectively.

At March 31, 2018 and December 31, 2017, the fair value measurements of our assets and liabilities measured on a recurring basis were as follows (in thousands):

	March 31, 2018			
	Total Fair Value and Carrying Value on Balance Sheet	Fair Value Measurements at Reporting Date Using 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 funds	$126,049	$126,049	$—	$ —
Marketable securities:				
Foreign debt	293,939	—	293,939	—
Foreign government obligations	117,699	—	117,699	—
U.S. debt	53,498	—	53,498	—

Time deposits	555,000	555,000	—	—	
Restricted investments	269,935	—	269,935	—	
Derivative assets	3,330	—	3,330	—	
Total assets	$1,419,450	$681,049	$ 738,401	$	—
Liabilities:					
Derivative liabilities	$22,891	$—	$ 22,891	$	—

Table of Contents

	December 31, 2017			
	Total Fair Value and Carrying Value on Balance Sheet	Fair Value Measurements at Reporting Date Using 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	$125,585	$125,585	$—	$ —
Marketable securities:				
Foreign debt	238,858	—	238,858	—
Foreign government obligations	152,850	—	152,850	—
U.S. debt	73,671	—	73,671	—
Time deposits	255,000	255,000	—	—
Restricted investments	373,961	—	373,961	—
Derivative assets	4,303	—	4,303	—
Total assets	$1,224,228	$380,585	$ 843,643	$ —
Liabilities:				
Derivative liabilities	$33,229	$—	$ 33,229	$ —

Fair Value of Financial Instruments

At March 31, 2018 and December 31, 2017, the carrying values and fair values of our financial instruments not measured at fair value were as follows (in thousands):

	March 31, 2018		December 31, 2017	
	Carrying Value	Fair Value	Carrying Value	Fair Value
Assets:				
Notes receivable – noncurrent	$10,410	$10,372	$10,495	$10,516
Notes receivable, affiliate – current	20,411	22,939	20,411	23,317
Note receivable, affiliate – noncurrent	47,798	45,886	48,370	47,441
Liabilities:				
Long-term debt, including current maturities (1)	$449,860	$453,658	$406,388	$416,486

(1) Excludes capital lease obligations and unamortized discounts and issuance costs.

The carrying values in our condensed consolidated balance sheets of our cash and cash equivalents, trade accounts receivable, unbilled accounts receivable and retainage, restricted cash, accounts payable, income taxes payable, and accrued expenses approximated their fair values due to their nature and relatively short maturities; therefore, we excluded them from the foregoing table. The fair value measurements for our notes receivable and long-term debt are considered Level 2 measurements 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, trade accounts receivable, restricted cash and investments, notes receivable, 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 cash and investments, and foreign exchange forward contracts with various high-quality financial institutions and limit the

Table of Contents

amount of credit risk from any one counterparty. We continuously evaluate the credit standing of our counterparty financial institutions. Our net sales are primarily concentrated among a limited number of customers. We monitor the financial condition of our customers and perform credit evaluations whenever considered necessary. Depending upon the sales arrangement, we may require some form of payment security from our customers, including advance payments, parent guarantees, bank guarantees, or commercial letters of credit.

9. Equity Method Investments

From time to time, we may enter into investments or other strategic arrangements to expedite our penetration of certain markets and establish relationships with potential customers. We may also enter into strategic arrangements with customers or other entities to maximize the value of particular projects. Some of these arrangements may involve significant investments or other allocations of capital. Investments in unconsolidated entities for which we have significant influence, but not control, over the entities' operating and financial activities are accounted for under the equity method of accounting. The following table summarizes our equity method investments as of March 31, 2018 and December 31, 2017 (in thousands):

	March 31, 2018	December 31, 2017
8point3 Operating Company, LLC	$ 191,655	$ 199,477
Clean Energy Collective, LLC	5,796	6,521
Other	3,504	11,232
Equity method investments	$ 200,955	$ 217,230

8point3 Operating Company, LLC

In June 2015, 8point3 Energy Partners LP (the "Partnership"), a limited partnership formed by First Solar and SunPower Corporation ("SunPower," and together with First Solar, the "Sponsors"), completed its initial public offering (the "IPO") pursuant to a Registration Statement on Form S-1, as amended. As part of the IPO, the Sponsors contributed interests in various projects to 8point3 Operating Company, LLC ("OpCo") in exchange for voting and economic interests in the entity, and the Partnership acquired an economic interest in OpCo using proceeds from the IPO. Since the formation of the Partnership, the Sponsors have, from time to time, sold interests in solar projects to the Partnership, which owns and operates such portfolio of solar energy generation projects.

In February 2018, we entered into an agreement with CD Clean Energy and Infrastructure V JV, LLC, an equity fund managed by Capital Dynamics, Inc. ("Capital Dynamics") and certain other co-investors and other parties, pursuant to which such parties have agreed, subject to the satisfaction of certain conditions, to acquire our interests in the Partnership and its subsidiaries. As of March 31, 2018, we owned an aggregate of 22,116,925 Class B shares representing a 28% voting interest in the Partnership, and an aggregate of 6,721,810 common units and 15,395,115 subordinated units in OpCo together representing a 28% limited liability company interest in the entity. Future quarterly distributions from OpCo are subject to a subordination period in which holders of the subordinated units are not entitled to receive any distributions until the common units have received their minimum quarterly distribution plus any arrearages in the payment of minimum distributions from prior quarters. The subordination period will end after OpCo has earned and paid minimum quarterly distributions for three years ending on or after August 31, 2018 and there are no outstanding arrearages on common units. Notwithstanding the foregoing, the subordination period could end early if OpCo has earned and paid 150% of minimum quarterly distributions, plus the related distributions to incentive distribution right holders, for one year and there are no outstanding arrearages on common units. At the end of the subordination period, all subordinated units will convert to common units on a one-for-one basis. During the three months ended March 31, 2018, we received distributions from OpCo of $6.2 million. We also hold certain incentive distribution rights in OpCo, which represent a right to incremental distributions after certain distribution thresholds are met.

22

Table of Contents

The Partnership is managed and controlled by its general partner, 8point3 General Partner, LLC ("General Partner"), and we account for our interest in OpCo, a subsidiary of the Partnership, under the equity method of accounting as we are able to exercise significant influence over the Partnership due to our representation on the board of directors of its General Partner and certain of our associates serving as officers of its General Partner. Under the equity method of accounting, we recognize equity in earnings for our proportionate share of OpCo's net income or loss, including adjustments for the amortization of a $40.2 million remaining basis difference, which resulted from the cost of our investment differing from our proportionate share of OpCo's equity. We recognized losses, net of tax, from our investment in OpCo of $1.2 million and equity in earnings, net of tax, of $0.8 million for the three months ended March 31, 2018 and 2017, respectively.

In connection with the IPO, we also entered into an agreement with a subsidiary of the Partnership to lease back one of our originally contributed projects, Maryland Solar, until December 31, 2019. Under the terms of the agreement, we make fixed rent payments to the Partnership's subsidiary and are entitled to all of the energy generated by the project. Due to our continuing involvement with the project, we account for the leaseback agreement as a financing transaction. In March 2018, FirstEnergy Solutions Corp. ("FirstEnergy"), the offtaker for the Maryland Solar PPA, filed for chapter 11 bankruptcy protection, and in April 2018, FirstEnergy filed a motion for entry of an order authorizing FirstEnergy and its affiliates to reject certain energy contracts, including the Maryland Solar PPA. In the event the PPA is terminated, we expect to sell energy generated by the Maryland Solar project on an open contract basis. As of March 31, 2018 and December 31, 2017, our financing obligation associated with the leaseback was $33.8 million and $35.0 million, respectively, which exceeded the associated carrying value of the Maryland Solar project on our condensed consolidated balance sheets.

In December 2016, we completed the sale of our remaining 34% interest in the 300 MW Desert Stateline project located in San Bernardino County, California to OpCo and received a $50.0 million promissory note as part of the consideration for the sale. The promissory note is unsecured and matures in December 2020. The promissory note bears interest at 4% per annum, which rate may increase to 6% per annum (i) upon the occurrence and during the continuation of a specified event of default and (ii) in respect of amounts accrued as payments-in-kind pursuant to the terms of such promissory note. Subject to certain conditions, OpCo may prepay the promissory note. Until OpCo has paid in full the principal and interest on the promissory note, OpCo is restricted in its ability to: (i) acquire interests in additional projects; (ii) use the net proceeds of equity issuances except as prescribed in the promissory note; (iii) incur additional indebtedness to which the promissory note would be subordinate; and (iv) extend the maturity date under OpCo's existing credit facility. As of March 31, 2018 and December 31, 2017, the balance outstanding on the promissory note was $47.8 million and $48.4 million, respectively.

We provide operations and maintenance ("O&M") services to certain of the Partnership's partially owned project entities, including SG2 Holdings, LLC; Lost Hills Blackwell Holdings, LLC; NS Solar Holdings, LLC; Kingbird Solar A, LLC; Kingbird Solar B, LLC; and Desert Stateline LLC. During the three months ended March 31, 2018 and 2017, we recognized revenue of $2.9 million, respectively, for such O&M services.

In June 2015, OpCo entered into a $525.0 million senior secured credit facility, consisting of a $300.0 million term loan facility, a $25.0 million delayed draw term loan facility, and a $200.0 million revolving credit facility (the "OpCo Credit Facility"). In September 2016, OpCo amended the OpCo Credit Facility to include an incremental $250.0 million term loan facility, which increased the maximum borrowing capacity under the OpCo Credit Facility to $775.0 million. The OpCo Credit Facility is secured, in part, by a pledge of the Sponsors' equity interests in OpCo.

Clean Energy Collective, LLC

In November 2014, we entered into various agreements to purchase a minority ownership interest in Clean Energy Collective, LLC ("CEC"). This investment provided us with additional access to the distributed generation market and a

partner to develop and market community solar offerings to North American residential customers and businesses directly on behalf of client utility companies. As part of the investment, we also received a warrant to purchase additional ownership interests in CEC.

Table of Contents

In addition to our equity investment, we also entered into a term loan agreement and a convertible loan agreement with CEC in November 2014 and February 2016, respectively. In August 2017, we amended the terms of the warrant and loan agreements to (i) fix the exercise price of the warrant at our initial investment price per unit, (ii) extend the maturity of the loans to November 2018, (iii) allow for the capitalization of certain accrued and future interest on the term loan, (iv) require mandatory prepayments on the term loan under certain conditions, and (v) fix the interest rate of the term loan at 16% per annum, payable semiannually. The interest rate of the convertible loan remained at 10% per annum, payable at maturity unless converted earlier pursuant to a qualified equity financing by CEC. As of March 31, 2018 and December 31, 2017, the balance outstanding on the term loan was $15.8 million and the balance outstanding on the convertible loan was $4.6 million.

CEC is considered a variable interest entity, and our 26% ownership interest in and loans to the company are considered variable interests. We account for our investment in CEC under the equity method of accounting as we are not the primary beneficiary of the company given that we do not have the power to make decisions over the activities that most significantly impact the company's economic performance. Under the equity method of accounting, we recognize equity in earnings for our proportionate share of CEC's net income or loss, including adjustments for the amortization of a basis difference resulting from the cost of our investment differing from our proportionate share of CEC's equity. During the three months ended March 31, 2018 and 2017, we recognized losses, net of tax, of $0.5 million and $1.2 million, respectively, from our investment in CEC.

10. Debt

Our long-term debt consisted of the following at March 31, 2018 and December 31, 2017 (in thousands):

Loan Agreement	Currency	Balance (USD)	
		March 31, 2018	December 31, 2017
Revolving Credit Facility	USD	$—	$ —
Luz del Norte Credit Facilities	USD	186,462	185,675
Ishikawa Credit Agreement	JPY	163,610	121,446
Japan Credit Facility	JPY	—	10,710
Tochigi Credit Facility	JPY	—	—
Mashiko Credit Agreement	JPY	—	—
Marikal Credit Facility	INR	7,137	7,384
Hindupur Credit Facility	INR	—	18,722
Anantapur Credit Facility	INR	17,308	—
Tungabhadra Credit Facility	INR	13,963	—
Manildra Credit Facility	AUD	61,380	62,451
Capital lease obligations	Various	127	156
Long-term debt principal		449,987	406,544
Less: unamortized discounts and issuance costs		(12,108)	(13,004)
Total long-term debt		437,879	393,540
Less: current portion		(6,062)	(13,075)
Noncurrent portion		$431,817	$ 380,465

Revolving Credit Facility

Our amended and restated credit agreement with several financial institutions as lenders and JPMorgan Chase Bank, N.A. as administrative agent provides us with a senior secured credit facility (the "Revolving Credit Facility") with an aggregate borrowing capacity of $500.0 million, which we may increase to $750.0 million, subject to certain conditions. Borrowings under the credit facility bear interest at (i) London Interbank Offered Rate ("LIBOR"), adjusted

for Eurocurrency reserve requirements, plus a margin of 2.00% or (ii) a base rate as defined in the credit agreement plus

Table of Contents

a margin of 1.00% depending on the type of borrowing requested. These margins are also subject to adjustment depending on our consolidated leverage ratio. We had no borrowings under our Revolving Credit Facility as of March 31, 2018 and December 31, 2017 and had issued $35.9 million and $57.5 million, respectively, of letters of credit using availability under the facility. Loans and letters of credit issued under the Revolving Credit Facility are jointly and severally guaranteed by First Solar, Inc.; First Solar Electric, LLC; First Solar Electric (California), Inc.; and First Solar Development, LLC and are secured by interests in substantially all of the guarantors' tangible and intangible assets other than certain excluded assets.

In addition to paying interest on outstanding principal under the Revolving Credit Facility, we are required to pay a commitment fee at a rate of 0.30% per annum, based on the average daily unused commitments under the facility, which may also be adjusted due to changes in our consolidated leverage ratio. We also pay a letter of credit fee based on the applicable margin for Eurocurrency revolving loans on the face amount of each letter of credit and a fronting fee of 0.125%. Our Revolving Credit Facility matures in July 2022.

Luz del Norte Credit Facilities

In August 2014, Parque Solar Fotovoltaico Luz del Norte SpA ("Luz del Norte"), our indirect wholly-owned subsidiary and project company, entered into credit facilities with the Overseas Private Investment Corporation ("OPIC") and the International Finance Corporation ("IFC") to provide limited-recourse senior secured debt financing for the design, development, financing, construction, testing, commissioning, operation, and maintenance of a 141 MW PV solar power plant located near Copiapó, Chile. At the same time, Luz del Norte also entered into a Chilean peso facility (the "VAT facility" and together with the OPIC and IFC loans, the "Luz del Norte Credit Facilities") with Banco de Crédito e Inversiones to fund Chilean value added tax associated with the construction of the Luz del Norte project. In March 2017, we repaid the remaining balance on the VAT facility.

In March 2017, we amended the terms of the OPIC and IFC credit facilities. Such amendments (i) allowed for the capitalization of accrued and unpaid interest through March 15, 2017, along with the capitalization of certain future interest payments as variable rate loans under the credit facilities, (ii) allowed for the conversion of certain fixed rate loans to variable rate loans upon scheduled repayment, (iii) extended the maturity of the OPIC and IFC loans until June 2037, and (iv) canceled the remaining borrowing capacity under the OPIC and IFC credit facilities with the exception of the capitalization of certain future interest payments. As of March 31, 2018 and December 31, 2017, the balance outstanding on the OPIC loans was $139.6 million and $139.0 million, respectively. As of March 31, 2018 and December 31, 2017, the balance outstanding on the IFC loans was $46.8 million and $46.6 million, respectively. The OPIC and IFC loans are secured by liens over all of Luz del Norte's assets, which had an aggregate book value of $326.3 million, including intercompany charges, as of March 31, 2018 and by a pledge of all of the equity interests in the entity.

Ishikawa Credit Agreement

In December 2016, FS Japan Project 12 GK ("Ishikawa"), our indirect wholly-owned subsidiary and project company, entered into a credit agreement (the "Ishikawa Credit Agreement") with Mizuho Bank, Ltd. for aggregate borrowings of up to ¥27.3 billion ($256.5 million) for the development and construction of a 59 MW PV solar power plant located in Ishikawa, Japan. The credit agreement consists of a ¥24.0 billion ($225.5 million) senior loan facility, a ¥2.1 billion ($19.7 million) consumption tax facility, and a ¥1.2 billion ($11.3 million) letter of credit facility. The senior loan facility matures in October 2036, and the consumption tax facility matures in April 2020. The credit agreement is secured by pledges of Ishikawa's assets, accounts, material project documents, and by the equity interests in the entity. As of March 31, 2018 and December 31, 2017, the balance outstanding on the credit agreement was $163.6 million and $121.4 million, respectively.

25

Table of Contents

Japan Credit Facility

In September 2015, First Solar Japan GK, our wholly-owned subsidiary, entered into a construction loan facility with Mizuho Bank, Ltd. for borrowings up to ¥4.0 billion ($37.6 million) for the development and construction of utility-scale PV solar power plants in Japan (the "Japan Credit Facility"). In September 2017, First Solar Japan GK renewed the facility for an additional one-year period until September 2018. The facility is guaranteed by First Solar, Inc. and secured by pledges of certain projects' cash accounts and other rights in the projects. As of March 31, 2018 and December 31, 2017, the balance outstanding on the facility was zero and $10.7 million, respectively.

Tochigi Credit Facility

In June 2017, First Solar Japan GK, our wholly-owned subsidiary, entered into a term loan facility with Mizuho Bank, Ltd. for borrowings up to ¥7.0 billion ($65.8 million) for the development of utility-scale PV solar power plants in Japan (the "Tochigi Credit Facility"). The majority of the facility is available to be drawn by or before November 2018, and the aggregate term loan facility matures in March 2021. The facility is guaranteed by First Solar, Inc. and secured by pledges of certain of First Solar Japan GK's accounts. As of March 31, 2018 and December 31, 2017, there was no balance outstanding on the term loan facility.

Mashiko Credit Agreement

In March 2018, FS Japan Project 14 GK ("Mashiko"), our indirect wholly-owned subsidiary and project company, entered into a credit agreement (the "Mashiko Credit Agreement") with Mizuho Bank, Ltd. for aggregate borrowings of up to ¥9.2 billion ($86.4 million) for the development and construction of a 19 MW PV solar power plant located in Tochigi, Japan. The credit agreement consists of a ¥8.1 billion ($76.1 million) senior loan facility, a ¥0.7 billion ($6.6 million) consumption tax facility, and a ¥0.4 billion ($3.8 million) letter of credit facility. The senior loan facility matures in March 2037, and the consumption tax facility matures in September 2020. The credit agreement is secured by pledges of Mashiko's assets, accounts, material project documents, and ownership interests. As of March 31, 2018, there was no balance outstanding on the credit agreement.

Marikal Credit Facility

In March 2015, Marikal Solar Parks Private Limited, our indirect wholly-owned subsidiary and project company, entered into a term loan facility (the "Marikal Credit Facility") with Axis Bank as administrative agent for aggregate borrowings up to INR 0.5 billion ($8.4 million) for the development and construction of a 10 MW PV solar power plant located in Telangana, India. The term loan facility matures in December 2028 and is secured by certain assets of the borrower, which had an aggregate book value of $116.2 million, including intercompany charges, as of March 31, 2018 and by a pledge of a portion of the equity interests in the borrower. In addition, the Marikal term loan facility is guaranteed by First Solar, Inc. until certain conditions are met, including the repayment of an intercompany loan to the project company. As of March 31, 2018 and December 31, 2017, the balance outstanding on the term loan facility was $7.1 million and $7.4 million, respectively.

Hindupur Credit Facility

In November 2016, Hindupur Solar Parks Private Limited, our indirect wholly-owned subsidiary and project company, entered into a term loan facility (the "Hindupur Credit Facility") with Yes Bank Limited for borrowings up to INR 4.3 billion ($66.0 million) for costs related to an 80 MW portfolio of PV solar power plants located in Andhra Pradesh, India. The term loan facility had a letter of credit sub-limit of INR 3.2 billion ($49.1 million), which was used for project related costs. In March 2018, we completed the sale of our Hindupur projects, and the outstanding balance of the Hindupur Credit Facility of $17.0 million was assumed by the customer. As of December 31, 2017, we

had issued INR 2.9 billion ($44.5 million) of letters of credit under the term loan facility. As of December 31, 2017, the balance outstanding on the term loan facility was $18.7 million.

Table of Contents

Anantapur Credit Facility

In March 2018, Anantapur Solar Parks Private Limited, our indirect wholly-owned subsidiary and project company, entered into a term loan facility (the "Anantapur Credit Facility") with J.P. Morgan Securities India Private Limited for borrowings up to INR 1.2 billion ($18.4 million) for costs related to a 20 MW PV solar power plant located in Karnataka, India. The term loan facility matures in February 2021 and is secured by a letter of credit issued by JPMorgan Chase Bank, N.A., Singapore, in favor of the lender. Such letter of credit is secured by a cash deposit placed by First Solar FE Holdings Pte. Ltd. As of March 31, 2018, the balance outstanding on the term loan facility was $17.3 million.

Tungabhadra Credit Facility

In March 2018, Tungabhadra Solar Parks Private Limited, our indirect wholly-owned subsidiary and project company, entered into a term loan facility (the "Tungabhadra Credit Facility") with J.P. Morgan Securities India Private Limited for borrowings up to INR 1.0 billion ($15.3 million) for costs related to a 20 MW PV solar power plant located in Karnataka, India. The term loan facility matures in February 2021 and is secured by a letter of credit issued by JPMorgan Chase Bank, N.A., Singapore, in favor of the lender. Such letter of credit is secured by a cash deposit placed by First Solar FE Holdings Pte. Ltd. As of March 31, 2018, the balance outstanding on the term loan facility was $14.0 million.

Manildra Credit Facility

In March 2017, Manildra Finco Pty Ltd, our indirect wholly-owned subsidiary and project financing company, entered into a term loan agreement (the "Manildra Credit Facility") with Société Générale S.A. and The Bank of Tokyo-Mitsubishi UFJ, Ltd. for borrowings up to AUD 81.7 million ($62.7 million) for costs related to a 49 MW PV solar power plant located in New South Wales, Australia. The credit facility consists of an AUD 75.7 million ($58.1 million) construction loan facility and an additional AUD 6.0 million ($4.6 million) goods and service tax facility (the "GST facility") to fund certain taxes associated with the construction of the associated project. Upon completion of the project's construction, the construction loan facility will convert to a term loan facility, which matures in March 2022. The GST facility matures in March 2019. The credit facility is secured by pledges of the borrower's assets, accounts, material project documents, and by the equity interests in the entity. As of March 31, 2018 and December 31, 2017, the balance outstanding on the term loan facility was $61.4 million and $62.5 million, respectively.

Variable Interest Rate Risk

Certain of our long-term debt agreements bear interest at prime, LIBOR, TIBOR, Bank Bill Swap Bid Rate ("BBSY"), or equivalent variable rates. A disruption of the credit environment could negatively impact interbank lending and, therefore, negatively impact these floating rates. An increase in prime, LIBOR, TIBOR, BBSY, or equivalent variable rates would increase the cost of borrowing under our Revolving Credit Facility and certain project specific debt financings.

Table of Contents

Our long-term debt borrowing rates as of March 31, 2018 were as follows:

Loan Agreement	March 31, 2018
Revolving Credit Facility	3.88%
Luz del Norte Credit Facilities (1)	Fixed rate loans at bank rate plus 3.50% Variable rate loans at 91-Day U.S. Treasury Bill Yield or LIBOR plus 3.50%
Ishikawa Credit Agreement	Senior loan facility at 6-month TIBOR plus 0.75% (2) Consumption tax facility at 3-month TIBOR plus 0.5%
Japan Credit Facility	1-month TIBOR plus 0.5%
Tochigi Credit Facility	3-month TIBOR plus 1.0%
Mashiko Credit Agreement	Senior loan facility at 6-month TIBOR plus 0.70% Consumption tax facility at 3-month TIBOR plus 0.5%
Marikal Credit Facility	Bank rate plus 2.35%
Anantapur Credit Facility	INR overnight indexed swap rate plus 1.5%
Tungabhadra Credit Facility	INR overnight indexed swap rate plus 1.5%
Manildra Credit Facility	Construction loan facility at 1-month BBSY plus 1.70% (2) GST facility at 1-month BBSY plus 1.60%
Capital lease obligations	Various

(1) Outstanding balance comprised of $164.0 million of fixed rate loans and $22.4 million of variable rate loans as of March 31, 2018.

(2) We have entered into interest rate swap contracts to hedge portions of these variable rates. See Note 7. “Derivative Financial Instruments” to our condensed consolidated financial statements for additional information.

Future Principal Payments

At March 31, 2018, the future principal payments on our long-term debt, excluding payments related to capital leases, were due as follows (in thousands):

	Total Debt
Remainder of 2018	$1,565
2019	11,344
2020	22,978
2021	41,568
2022	58,082
Thereafter	314,323
Total long-term debt future principal payments	$449,860

Table of Contents

11. Commitments and Contingencies

Commercial Commitments

During the normal course of business, we enter into commercial commitments in the form of letters of credit, bank guarantees, and surety bonds to provide financial and performance assurance to third parties. Our amended and restated Revolving Credit Facility provides us with a sub-limit of $400.0 million to issue letters of credit, subject to certain additional limits depending on the currencies of the letters of credit, at a fee based on the applicable margin for Eurocurrency revolving loans and a fronting fee. As of March 31, 2018, we had $35.9 million in letters of credit issued under our Revolving Credit Facility, leaving $364.1 million of availability for the issuance of additional letters of credit. The majority of these letters of credit supported our systems projects. As of March 31, 2018, we also had $1.6 million of bank guarantees and letters of credit under separate agreements that were posted by certain of our foreign subsidiaries and $216.0 million of letters of credit issued under three bilateral facilities, of which $36.9 million was secured with cash. As of March 31, 2018, we also had $158.4 million of surety bonds outstanding, primarily for our systems projects. The available bonding capacity under our surety lines was $558.5 million as of March 31, 2018.

In addition to the commercial commitments noted above, we have also issued certain commercial letters of credit, also known as letters of undertaking, under our Hindupur Credit Facility as discussed in Note 10. “Debt” to our condensed consolidated financial statements. Such commercial letters of credit represent conditional commitments on the part of the issuing financial institution to provide payment on amounts drawn in accordance with the terms of the individual documents. As part of the financing of the associated systems projects, we presented these commercial letters of credit to other financial institutions, whereby we received immediate funding, and these other financial institutions agreed to settle such letters at a future date. At the time of settlement, the balance of the commercial letters of credit will be included in the balance outstanding of the respective credit facility. In the periods between the receipt of cash and the subsequent settlement of the commercial letters of credit, we accrue interest on the balance or otherwise accrete any discounted value of the letters to their face value and record such amounts as “Interest expense, net” on our condensed consolidated statements of operations. In March 2018, we completed the sale of our Hindupur projects, and the outstanding letters of credit of $43.3 million under the Hindupur Credit Facility were assumed by the customer. As of December 31, 2017, we accrued $43.4 million for contingent obligations associated with such commercial letters of credit. These amounts were classified as “Other liabilities” on our condensed consolidated balance sheets to align with the timing in which we expected to settle such obligations as payments under the associated credit facility.

Supply Agreement

In March 2018, we entered into a 10-year supply agreement for the purchase of cover glass for our PV solar modules. Under the terms of the agreement, we expect to pay approximately $500 million over the 10-year supply period, which is scheduled to begin by January 2020. The agreement includes a termination penalty of up to $80 million, which declines annually on a straight-line basis over a period of six years.

Product Warranties

When we recognize revenue for module or system sales, we accrue liabilities for the estimated future costs of meeting our limited warranty obligations for both modules and the balance of the systems. We make and revise these estimates based primarily on the number of solar modules under warranty installed at customer locations, our historical experience with warranty claims, our monitoring of field installation sites, our internal testing and the expected future performance of our solar modules and balance of systems (“BoS”) parts, and our estimated replacement costs. From time to time, we have taken remediation actions with respect to affected modules beyond our limited warranties and 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 obligations may be material to our condensed consolidated

statements of operations if we commit to any such remediation actions.

Table of Contents

Product warranty activities during the three months ended March 31, 2018 and 2017 were as follows (in thousands):

	Three Months Ended March 31,	
	2018	2017
Product warranty liability, beginning of period	$224,274	$252,408
Accruals for new warranties issued	3,632	5,016
Settlements	(2,609)	(1,667)
Changes in estimate of product warranty liability	503	(2,335)
Product warranty liability, end of period	$225,800	$253,422
Current portion of warranty liability	$32,655	$40,432
Noncurrent portion of warranty liability	$193,145	$212,990

We estimate our limited product warranty liability for power output and defects in materials and workmanship under normal use and service conditions based on warranty return rates of approximately 1% to 3% for modules covered under warranty, depending on the series of module technology. As of March 31, 2018, a 1% change in estimated warranty return rates would change our module warranty liability by $73.2 million, and a 1% change in the estimated warranty return rate for BoS parts would not have a material impact on the associated warranty liability.

Performance Guarantees

As part of our systems business, we conduct performance testing of a system prior to substantial completion to confirm the system meets its operational and capacity expectations noted in the engineering, procurement, and construction ("EPC") agreement. In addition, we may provide an energy performance test during the first or second year of a system's operation to demonstrate that the actual energy generation for the applicable period meets or exceeds the modeled energy expectation, after certain adjustments. If there is an underperformance event with regards to these tests, we may incur liquidated damages as specified in the EPC contract. In certain instances, a bonus payment may be received at the end of the applicable test period if the system performs above a specified level. As of March 31, 2018 and December 31, 2017, we accrued $3.6 million and $2.1 million, respectively, of estimated obligations under such arrangements, which were classified as "Other current liabilities" in our condensed consolidated balance sheets.

As part of our O&M service offerings, we typically offer an effective availability guarantee, which stipulates that a system will be available to generate a certain percentage of total possible energy during a specific period after adjusting for factors outside of our control as the service provider, such as weather, curtailment, outages, force majeure, and other conditions that may affect system availability. Effective availability guarantees are only offered as part of our O&M services and terminate at the end of an O&M arrangement. If we fail to meet the contractual threshold for these guarantees, we may incur liquidated damages for certain lost energy under the PPA. Our O&M agreements typically contain provisions limiting our total potential losses under an agreement, including amounts paid for liquidated damages, to a percentage of O&M fees. Many of our O&M agreements also contain provisions whereby we may receive a bonus payment if system availability exceeds a separate threshold. As of March 31, 2018 and December 31, 2017, we did not accrue any estimated obligations under our effective availability guarantees.

Indemnifications

In certain limited circumstances, we have provided indemnifications to customers, including project tax equity investors, under which we are contractually obligated to compensate such parties for losses they suffer resulting from a breach of a representation, warranty, or covenant or a reduction in tax benefits received, including investment tax credits. Project related tax benefits are, in part, based on guidance provided by the Internal Revenue Service and U.S. Treasury Department, which includes assumptions regarding the fair value of qualifying PV solar power systems. For any sales contracts that have such indemnification provisions, we initially recognize a liability under ASC 460,

Guarantees, for the estimated premium that would be required by a guarantor to issue the same indemnity in a standalone arm's-length transaction with an unrelated party. We initially measure such liabilities at the greater of the fair value of the indemnity

Table of Contents

or the contingent liability required to be recognized under ASC 450, Contingencies, and reduce the revenue recognized in the related transaction.

We estimate the fair value of any such indemnities provided based on the cost of insurance policies that cover the underlying risks being indemnified and may purchase such policies to mitigate our exposure to potential indemnification payments. After an indemnification liability is recorded, we derecognize such amount pursuant to ASC 460-10-35-2 depending on the nature of the indemnity, which derecognition typically occurs upon expiration or settlement of the arrangement, and any contingent aspects of the indemnity are accounted for in accordance with ASC 450. Changes to any such indemnification liabilities provided are recorded as adjustments to revenue. As of March 31, 2018 and December 31, 2017, we accrued $4.9 million of noncurrent indemnification liabilities for tax related indemnifications. As of December 31, 2017, we also accrued $2.9 million of current indemnification liabilities for such matters. As of March 31, 2018, the maximum potential amount of future payments under our tax related indemnifications was $122.3 million, and we held insurance policies allowing us to recover up to $84.9 million of potential amounts paid under the indemnifications covered by the policies.

Contingent Consideration

As part of our prior acquisition of Enki Technology, Inc. (“Enki”), we agreed to pay additional consideration to the selling shareholders contingent upon the achievement of certain production and module performance milestones. As of March 31, 2018 and December 31, 2017, we accrued $1.8 million of current liabilities for our contingent obligations associated with the Enki acquisition based on their estimated fair values and the expected timing of payment.

We continually seek to make additions to our advanced-stage project pipeline by actively developing our early-to-mid-stage project pipeline and by pursuing opportunities to acquire projects at various stages of development. In connection with such project acquisitions, we may agree to pay additional amounts to project sellers upon the achievement of certain milestones, such as obtaining a PPA, obtaining financing, or selling the project to a new owner. We recognize a project acquisition contingent liability when we determine that such a liability is both probable and reasonably estimable, and the carrying amount of the related project asset is correspondingly increased. As of March 31, 2018 and December 31, 2017, we accrued $4.1 million and $4.4 million of current liabilities, respectively, and $3.2 million of long-term liabilities for such contingent obligations. Any future differences between the acquisition-date contingent obligation estimate and the ultimate settlement of the obligation are recognized as an adjustment to the project asset, as contingent payments are considered direct and incremental to the underlying value of the related project.

Solar Module Collection and Recycling Liability

We voluntarily established a module collection and recycling program to collect and recycle modules sold and covered under such program once the modules reach the end of their useful lives. For customer sales contracts that include modules covered under this program, we agree to pay the costs for the collection and recycling of qualifying solar modules, and the end-users agree to notify us, disassemble their solar power systems, package the solar modules for shipment, and revert ownership rights over the modules back to us at the end of the modules’ service lives. Accordingly, we record any collection and recycling obligations within “Cost of sales” at the time of sale based on the estimated cost to collect and recycle the covered solar modules. During the three months ended March 31, 2018 and 2017, substantially all of our modules sold were not covered by our collection and recycling program.

We estimate the cost of our collection and recycling obligations based on the present value of the expected probability-weighted future cost of collecting and recycling the solar modules, which includes estimates for the cost of packaging materials; the cost of freight from the solar module installation sites to a recycling center; material, labor,

and capital costs; the scale of recycling centers; and an estimated third-party profit margin and return on risk for collection and recycling services. We base these estimates on (i) our experience collecting and recycling our solar modules, (ii) the expected timing of when our solar modules will be returned for recycling, and (iii) the expected economic conditions at the time the solar modules will be collected and recycled. In the periods between the time of sale and the related settlement of the collection and recycling obligation, we accrete the carrying amount of the associated liability by

Table of Contents

applying the discount rate used for its initial measurement. We classify accretion as an operating expense within "Selling, general and administrative" expense on our condensed consolidated statements of operations. We periodically review our estimates of expected future recycling costs and may adjust our liability accordingly.

Our module collection and recycling liability was $170.4 million and $166.6 million as of March 31, 2018 and December 31, 2017, respectively. As of March 31, 2018, a 1% increase in the annualized inflation rate used in our estimated future collection and recycling cost per module would increase our liability by $34.2 million, and a 1% decrease in that rate would decrease our liability by $28.7 million.

See Note 5. "Restricted Cash and Investments" to our condensed consolidated financial statements for more information about our arrangements for funding this liability.

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 persons who purchased or otherwise acquired the Company's publicly traded securities between April 30, 2008 and February 28, 2012 (the "Class Action"). 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, including interest, and an award of reasonable costs and attorneys' fees to the putative class. 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, the "Pension Schemes"). The Pension Schemes filed an amended complaint on August 17, 2012, which contains similar allegations and seeks similar relief as the original complaint. Defendants filed a motion to dismiss on September 14, 2012. On December 17, 2012, the court denied defendants' motion to dismiss. On October 8, 2013, the Arizona District Court granted the Pension Schemes' motion for class certification, and certified a class comprised of all persons who purchased or otherwise acquired publicly traded securities of the Company between April 30, 2008 and February 28, 2012 and were damaged thereby, excluding defendants and certain related parties. Merits discovery closed on February 27, 2015.

Defendants filed a motion for summary judgment on March 27, 2015. On August 11, 2015, the Arizona District Court granted defendants' motion in part and denied it in part, and certified an issue for immediate appeal to the Ninth Circuit Court of Appeals (the "Ninth Circuit"). First Solar filed a petition for interlocutory appeal with the Ninth Circuit, and that petition was granted on November 18, 2015. On May 20, 2016, the Pension Schemes moved to vacate the order granting the petition, dismiss the appeal, and stay the merits briefing schedule. On December 13, 2016, the Ninth Circuit denied the Pension Schemes' motion. On January 31, 2018, the Ninth Circuit issued an opinion affirming the Arizona District Court's order denying in part defendants' motion for summary judgment. On March 16, 2018, First Solar filed a petition for panel rehearing or rehearing en banc with the Ninth Circuit, which remains pending.

This lawsuit asserts claims that, if resolved against us, could give rise to substantial damages, and an unfavorable outcome or settlement may result in a significant monetary judgment or award against us or a significant monetary payment by us, and could have a material adverse effect on our business, financial condition, or results of operations. Even if this lawsuit is not resolved against us, the costs of defending the lawsuit may be significant, as may be the cost of any settlement, and would likely exceed the coverage limits of, or may not be covered by, our

insurance policies. Given the need for further expert discovery, and the uncertainties of trial, at this time we are not in a position to assess the likelihood of any potential loss or adverse effect on our financial condition or to estimate the range of potential loss, if any.

Table of Contents

Opt-Out Action

On June 23, 2015, a suit titled Maverick Fund, L.D.C. v. First Solar, Inc., et al., Case No. 2:15-cv-01156-ROS, was filed in Arizona District Court by putative stockholders that opted out of the Class Action. The complaint names the Company and certain of our current and former directors and officers as defendants, and alleges that the defendants violated Sections 10(b) and 20(a) of the Securities Exchange Act of 1934, and violated state law, by making false and misleading statements regarding the Company's financial performance and prospects. The action includes claims for recessionary and actual damages, interest, punitive damages, and an award of reasonable attorneys' fees, expert fees, and costs. The Company believes it has meritorious defenses and will vigorously defend this action.

First Solar and the individual defendants have not yet responded to the complaint. Accordingly, at this time we are not in a position to assess the likelihood of any potential loss or adverse effect on our financial condition 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. On May 15, 2012, defendants filed a motion to challenge Delaware as the appropriate venue for the consolidated action. On March 4, 2013, the magistrate judge issued a Report and Recommendation recommending to the court that defendants' motion be granted and that the case be transferred to the Arizona District Court. On July 12, 2013, the court adopted the magistrate judge's Report and Recommendation and ordered the case transferred to the Arizona District Court. The transfer was completed on July 15, 2013.

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

On July 17, 2012, the Arizona District Court issued an order granting First Solar's motion to transfer the derivative actions to Judge David Campbell, the judge to whom the Smilovits class action is assigned. On August 8, 2012, the court consolidated the four derivative actions pending in Arizona District Court, and on August 31, 2012, plaintiffs filed an amended complaint. Defendants filed a motion to stay the action on September 14, 2012. On December 17, 2012, the Arizona District Court granted defendants' motion to stay pending resolution of the Smilovits class action.

On August 13, 2013, Judge Campbell consolidated the two derivative actions transferred from the Delaware District Court with the stayed Arizona derivative actions. On February 19, 2016, the Arizona District Court issued an order lifting the stay in part. Pursuant to the February 19, 2016 order, the plaintiffs filed an amended complaint on March 11, 2016, and defendants filed a motion to dismiss the amended complaint on April 1, 2016. On June 30, 2016, the

Table of Contents

Arizona District Court granted defendants' motion to dismiss the insider trading and unjust enrichment claims with prejudice, and further granted defendants' motion to dismiss the claims for alleged breaches of fiduciary duties with leave to amend. On July 15, 2016, plaintiffs filed a motion to reconsider certain aspects of the order granting defendants' motion to dismiss. The Arizona District Court denied the plaintiffs' motion for reconsideration on August 4, 2016. On July 15, 2016, plaintiffs filed a motion to intervene, lift the stay, and unseal documents in the securities Class Action. On September 30, 2016, the Arizona District Court denied plaintiffs' motion. On October 17, 2016, plaintiffs filed a notice of appeal to the Ninth Circuit of the September 30, 2016 order (the "Intervention Appeal"). On October 27, 2016, plaintiffs filed a motion to extend the October 31, 2016 deadline to file an amended complaint. On November 29, 2016, the Arizona District Court denied plaintiffs' request and directed the clerk to terminate the action. On January 23, 2017, the Arizona District Court entered judgment in favor of defendants and terminated the action. On January 27, 2017, plaintiffs filed a notice of appeal to the Ninth Circuit (the "Merits Appeal"). On January 22, 2018, the Ninth Circuit ruled in favor of First Solar in the Intervention Appeal, and dismissed that appeal. Briefing and oral argument on the Merits Appeal is now complete and the parties are awaiting an opinion from the Ninth Circuit.

On July 16, 2013, a derivative complaint was filed in the Superior Court of Arizona, Maricopa County, titled Bargar, et al. v. Ahearn, et al., Case No. CV2013-009938, by a putative stockholder against certain current and former directors and officers of the Company. The complaint contains similar allegations to the Delaware and Arizona derivative cases, and includes claims for, among other things, breach of fiduciary duties, insider trading, unjust enrichment, and waste of corporate assets. By court order on October 3, 2013, the Superior Court of Arizona, Maricopa County granted the parties' stipulation to defer defendants' response to the complaint pending resolution of the Smilovits class action or expiration of the stay issued in the consolidated derivative actions in the Arizona District Court. On November 5, 2013, the matter was placed on the court's inactive calendar. The parties have jointly sought and obtained multiple requests to continue the stay in this action. Most recently, on October 25, 2017, the court entered an order continuing the stay until March 31, 2018.

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

Other Matters and Claims

We are party to other legal matters and claims in the normal course of our operations. While we believe the ultimate outcome of such other matters and claims will not have a material adverse effect on our financial position, results of operations, or cash flows, the outcome of such matters and claims is not determinable with certainty, and negative outcomes may adversely affect us.

Table of Contents

12. Revenue from Contracts with Customers

The following table represents a disaggregation of revenue from contracts with customers for the three months ended March 31, 2018 and 2017 along with the reportable segment for each category (in thousands):

		Three Months Ended March 31,	
Category	Segment	2018	2017
Solar modules	Modules	$161,293	$71,138
Solar power systems	Systems	354,410	752,482
EPC services	Systems	12,718	26,132
O&M services	Systems	26,714	24,696
Module plus	Systems	—	3,307
Energy generation (1)	Systems	12,130	14,036
Net sales		$567,265	$891,791

(1) The majority of energy generated and sold by our PV solar power systems was accounted for under ASC 840 consistent with the classification of the associated PPAs.

We generally recognize revenue for sales of solar power systems and/or EPC services over time using cost based input methods, in which significant judgment is required to evaluate assumptions including the amount of net contract revenues and the total estimated costs to determine our progress towards contract completion and to calculate the corresponding amount of revenue to recognize. If the estimated total costs on any contract are greater than the net contract revenues, we recognize the entire estimated loss in the period the loss becomes known. The cumulative effect of revisions to estimates related to net contract revenues or costs to complete contracts are recorded in the period in which the revisions to estimates are identified and the amounts can be reasonably estimated.

Changes in estimates for sales of systems and EPC services occur for a variety of reasons, including but not limited to (i) construction plan accelerations or delays, (ii) module cost forecast changes, (iii) cost related change orders, or (iv) changes in other information used to estimate costs. Changes in estimates may have a material effect on our condensed consolidated statements of operations. The following table outlines the impact on revenue of net changes in estimated transaction prices and input costs for systems related sales contracts (both increases and decreases) for the three months ended March 31, 2018 and 2017 as well as the number of projects that comprise such changes. For purposes of the table, we only include projects with changes in estimates that have a net impact on revenue of at least $1.0 million during the periods presented with the exception of the sales and use tax matter described below, for which the aggregate change in estimate has been presented. Also included in the table is the net change in estimate as a percentage of the aggregate revenue for such projects.

	Three Months Ended March 31,	
	2018	2017
Number of projects (1)	23	2
Increase (decrease) in revenue from net changes in transaction prices (in thousands) (1)	$53,150	$(3,328)
Increase in revenue from net changes in input cost estimates (in thousands)	1,955	1,176
Net increase (decrease) in revenue from net changes in estimates (in thousands)	$55,105	$(2,152)
Net change in estimate as a percentage of aggregate revenue for associated projects	0.5 %	(0.9)%

(1)

During the three months ended March 31, 2018, we settled a tax examination with the state of California regarding several matters, including certain sales and use tax payments due under lump sum EPC contracts. Accordingly, we revised our estimates of sales and use taxes due for projects in the state of California, which affected the estimated transaction prices for such contracts, and recorded an increase to revenue of $54.6 million.

Table of Contents

The following table reflects the changes in our contract assets, which we classify as "Accounts receivable, unbilled" or "Retainage," and our contract liabilities, which we classify as "Deferred revenue," for the three months ended March 31, 2018 (in thousands):

	March 31, 2018	December 31, 2017	Three Months Change	
Accounts receivable, unbilled	$149,806	$ 172,594		
Retainage	1,587	2,014		
Accounts receivable, unbilled and retainage	$151,393	$ 174,608	$(23,215)	(13)%
Deferred revenue (1)	$129,871	$ 145,073	$(15,202)	(10)%

(1) Includes $62.5 million and $63.3 million of long-term deferred revenue classified as "Other liabilities" on our condensed consolidated balance sheets as of March 31, 2018 and December 31, 2017, respectively.

Accounts receivable, unbilled represents a contract asset for revenue that has been recognized in advance of billing the customer, which is common for long-term construction contracts. Billing requirements vary by contract but are generally structured around the completion of certain construction milestones. Some of our EPC contracts for systems we build may also contain retainage provisions. Retainage represents a contract asset for the portion of the contract price earned by us for work performed, but held for payment by the customer as a form of security until we reach certain construction milestones.

When we receive consideration, or such consideration is unconditionally due, from a customer prior to transferring goods or services to the customer under the terms of a sales contract, we record deferred revenue, which represents a contract liability. Such deferred revenue typically results from billings in excess of costs incurred on long-term construction contracts and advance payments received on sales of solar modules.

During the three months ended March 31, 2018, our contract assets decreased by $23.2 million primarily due to scheduled billings on the California Flats project, partially offset by unbilled receivables associated with the completion of the sale of certain India projects in March 2018. During the three months ended March 31, 2018, our contract liabilities decreased by $15.2 million primarily as a result of the completion of the sale of certain Japan projects, for which we collected the proceeds in 2017, and the commencement of construction on the Payne Creek project, partially offset by advance payments received for sales of solar modules. During the three months ended March 31, 2018 and 2017, we recognized revenue of $33.8 million and $306.2 million, respectively, that was included in the corresponding contract liability balance at the beginning of the periods.

The following table represents our remaining performance obligations as of March 31, 2018 for sales of solar power systems, including uncompleted sold projects, projects under sales contracts subject to conditions precedent, and EPC agreements for partner developed projects that we are constructing or expect to construct. Such table excludes remaining performance obligations for any sales arrangements that had not fully satisfied the criteria to be considered a contract with a customer pursuant to the requirements of ASC 606. We expect to recognize $0.8 billion of revenue for such contracts through the later of the substantial completion or the closing dates of the projects.

Table of Contents

Project/Location	Project Size in MW_{AC}	Revenue Category	EPC Contract/Partner Developed Project	Expected Year Revenue Recognition Will Be Completed	Percentage of Revenue Recognized
California Flats, California	280	Solar power systems	Capital Dynamics	2018	72%
Rosamond, California	150	Solar power systems	Contracted but not specified	2018	16%
Balm Solar, Florida	74	EPC	Tampa Electric Company	2018	—%
Payne Creek, Florida	70	EPC	Tampa Electric Company	2018	11%
Grange Hall, Florida	61	EPC	Tampa Electric Company	2019	—%
Troy Solar, Indiana	51	EPC	Southern Indiana Gas and Electric Company	2020	—%
Total	686				

As of March 31, 2018, we had entered into contracts with customers for the future sale of 6.8 GW_{DC} of solar modules for an aggregate transaction price of $2.5 billion. We expect to recognize such amounts as revenue through 2021 as we transfer control of the modules to customers, which typically occurs upon shipment or delivery depending on the terms of the underlying contracts. As of March 31, 2018, we had also entered into long-term O&M contracts covering approximately 7 GW_{DC} of utility-scale PV solar power systems. We expect to recognize $0.6 billion of revenue during the noncancelable term of these O&M contracts over a weighted-average period of 11.7 years.

13. Share-Based Compensation

The following table presents the share-based compensation expense recognized in our condensed consolidated statements of operations for the three months ended March 31, 2018 and 2017 (in thousands):

	Three Months Ended March 31,	
	2018	2017
Cost of sales	$1,250	$1,700
Selling, general and administrative	5,661	4,222
Research and development	1,425	1,129
Production start-up	316	—
Total share-based compensation expense	$8,652	$7,051

The following table presents share-based compensation expense by type of award for the three months ended March 31, 2018 and 2017 (in thousands):

	Three Months Ended March 31,	
	2018	2017
Restricted and performance stock units	$8,405	$6,018
Unrestricted stock	460	419
Stock purchase plan	—	360
	8,865	6,797
Net amount (absorbed into) released from inventory	(213)	254

Total share-based compensation expense	$8,652	$7,051

Table of Contents

Share-based compensation expense capitalized in inventory was $2.3 million and $2.1 million as of March 31, 2018 and December 31, 2017, respectively. As of March 31, 2018, we had $55.2 million of unrecognized share-based compensation expense related to unvested restricted and performance stock units, which we expect to recognize over a weighted-average period of approximately 1.7 years.

Our long-term incentive program for key executive officers and associates consists of: (i) performance stock units to be earned over an approximately three-year performance period beginning in March 2017 and (ii) stub-year grants of separate performance stock units to be earned over an approximately two-year performance period also beginning in March 2017. Vesting of the performance stock units is contingent upon the achievement of certain performance objectives, including the relative attainment of target cost per watt and operating expense metrics. Performance stock units were included in the computation of diluted net income per share for the three months ended March 31, 2018 based on the number of shares that would be issuable if the end of the reporting period were the end of the contingency period.

14. Income Taxes

The Tax Act, enacted in December 2017, significantly revised U.S. tax law by, among other things, lowering the statutory federal corporate income tax rate from 35% to 21% for tax years beginning after December 31, 2017, eliminating certain deductions, imposing a one-time transition tax on certain accumulated earnings and profits of foreign corporate subsidiaries (the “transition tax”) that may electively be paid over eight years, introducing new tax regimes, and changing how foreign earnings are subject to U.S. tax. The Tax Act also includes many new provisions, such as changes to bonus depreciation, changes to deductions for executive compensation, net operating loss deduction limitations, a tax on global intangible low-taxed income (“GILTI”) earned by foreign corporate subsidiaries, a base erosion anti-abuse tax (“BEAT”), and a deduction for foreign-derived intangible income (“FDII”). We continue to evaluate the impact of the Tax Act on us.

In December 2017, the SEC issued Staff Accounting Bulletin No. 118 to (i) clarify certain aspects of accounting for income taxes under ASC 740 in the reporting period the Tax Act was signed into law when information is not yet available or complete and (ii) provide a measurement period up to one year to complete the accounting for the Tax Act. We have not completed our accounting for the Tax Act; however, in certain cases, we have made reasonable estimates of the effects of the Tax Act. In other cases, we have not been able to make a reasonable estimate of such tax effects and continued to account for the affected items, including state income taxes to the extent there is uncertainty regarding conformity to the federal tax system, based on previous tax laws. In all cases, we will continue to make and refine our estimates as additional analysis is completed. Our estimates may also be refined as we gain a more thorough understanding of the tax law. Any changes to our provisional estimates could be material to income tax expense.

As a result of the Tax Act, we remeasured certain deferred tax assets and liabilities based on the tax rate applicable to when the temporary differences are expected to reverse in the future, which is generally 21%, and recorded a provisional tax expense of $6.6 million for the year ended December 31, 2017 for such remeasurement. No adjustment to this provisional amount was made during the three months ended March 31, 2018. We continue to evaluate certain aspects of the Tax Act, which could potentially affect the remeasurement of these deferred tax balances and result in additional tax expense.

The transition tax was based on our total post-1986 foreign earnings and profits, which we had deferred from U.S. income taxes under previous U.S. tax law. We reasonably estimated and recorded a provisional transition tax expense of $401.5 million for the year ended December 31, 2017. No adjustment to this provisional amount was made during the three months ended March 31, 2018. As we continue gathering additional information to finalize our calculations of post-1986 foreign earnings and profits previously deferred from U.S. income taxes, the provisional amount may change. We have not completed our accounting for the transition tax, and as we finalize and complete our plans for the

reinvestment or repatriation of unremitted foreign earnings and are able to calculate the resulting tax effects, we expect to record such tax effects, if any, and disclose such plans within the measurement period.

Table of Contents

The Tax Act subjects a U.S. shareholder to tax on GILTI earned by foreign corporate subsidiaries. Because of the complexity of the new GILTI, BEAT, and FDII provisions of the Tax Act and different aspects of our estimated future results of global operations, we continue to evaluate the effects of the GILTI provisions and have not yet determined our accounting policy election to (i) record taxes due on future U.S. inclusions in taxable income related to GILTI as a current-period expense when incurred (the "period cost method") or (ii) factor such amounts into our measurement of deferred income taxes (the "deferred method"). Based on our evaluation, we included an estimate of the tax on GILTI in our effective tax rate for the three months ended March 31, 2018 but did not recognize additional GILTI on deferred items. We expect to complete our accounting for the GILTI provisions of the Tax Act and make a corresponding accounting policy election within the prescribed measurement period.

The BEAT provisions of the Tax Act impose a minimum tax related to certain deductible payments made to related foreign persons. In addition, the Tax Act disallows certain interest and royalty deductions for payments made to related parties depending on their countries' tax treatment of the payments. The new FDII provision allows a U.S. corporation to deduct 37.5% of its foreign-derived intangible income. We evaluated the impact of the BEAT and FDII provisions of the Tax Act on our expected 2018 operating results and expect such impact to be immaterial.

Our effective tax rate was 12.1% and 37.0% for the three months ended March 31, 2018 and 2017, respectively. The decrease in our effective tax rate was primarily driven by higher excess tax benefits associated with share-based compensation in 2018 and losses in 2017 in certain jurisdictions for which no tax benefit could be recorded, partially offset by accruals of interest and penalties for certain of our uncertain tax positions. Our provision for income taxes differed from the amount computed by applying the U.S. statutory federal income tax rate of 21% primarily due to excess tax benefits associated with share-based compensation and the beneficial impact of our Malaysian tax holiday, partially offset by accruals of interest and penalties for certain of our uncertain tax positions.

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

We account for uncertain tax positions pursuant to the recognition and measurement criteria under ASC 740, Income Taxes. It is reasonably possible that an additional $10.0 million of uncertain tax positions will also be recognized within the next 12 months due to the expiration of the statute of limitations associated with such positions.

We are subject to audit by U.S. federal, state, local, and foreign tax authorities. We are currently under examination in India, Chile, and the state of California. We believe that adequate provisions have been made for any adjustments that may result from tax examinations. However, the outcome of tax audits cannot be predicted with certainty. If any issues addressed by our tax audits are not resolved in a manner consistent with our expectations, we could be required to adjust our provision for income taxes in the period such resolution occurs.

Table of Contents

15. Net Income per Share

Basic net income per share is computed by dividing net income by the weighted-average number of common shares outstanding for the period. Diluted net income per share is computed giving effect to all potentially dilutive common shares, including restricted and performance stock units and stock purchase plan shares, unless there is a net loss for the period. In computing diluted net income per share, we utilize the treasury stock method.

The calculation of basic and diluted net income per share for the three months ended March 31, 2018 and 2017 was as follows (in thousands, except per share amounts):

	Three Months Ended March 31,	
	2018	2017
Basic net income per share		
Numerator:		
Net income	$82,951	$9,129
Denominator:		
Weighted-average common shares outstanding	104,550	104,103
Diluted net income per share		
Denominator:		
Weighted-average common shares outstanding	104,550	104,103
Effect of restricted and performance stock units and stock purchase plan shares	1,755	307
Weighted-average shares used in computing diluted net income per share	106,305	104,410
Net income per share:		
Basic	$0.79	$0.09
Diluted	$0.78	$0.09

The following table summarizes the potential shares of common stock that were excluded from the computation of diluted net income per share for the three months ended March 31, 2018 and 2017 as such shares would have had an anti-dilutive effect (in thousands):

	Three Months Ended March 31,	
	2018	2017
Anti-dilutive shares	21	337

Table of Contents

16. Accumulated Other Comprehensive (Loss) Income

Accumulated other comprehensive income or loss includes foreign currency translation adjustments, unrealized gains and losses on available-for-sale debt securities, and unrealized gains and losses on derivative instruments designated and qualifying as cash flow hedges. The following table presents the changes in accumulated other comprehensive income or loss, net of tax, for the three months ended March 31, 2018 (in thousands):

	Foreign Currency Translation Adjustment	Unrealized Gain (Loss) on Marketable Securities and Restricted Investments	Unrealized Gain (Loss) on Derivative Instruments	Total
Balance as of December 31, 2017	$ (65,346)	$ 68,388	$ (783)	$2,259
Other comprehensive income (loss) before reclassifications	6,014	(9,564)	(868)	(4,418)
Amounts reclassified from accumulated other comprehensive loss	—	(19,470)	—	(19,470)
Net tax effect	—	3,110	(64)	3,046
Net other comprehensive income (loss)	6,014	(25,924)	(932)	(20,842)
Balance as of March 31, 2018	$ (59,332)	$ 42,464	$ (1,715)	$(18,583)

The following table presents the pretax amounts reclassified from accumulated other comprehensive loss into our condensed consolidated statements of operations for the three months ended March 31, 2018 and 2017 (in thousands):

Comprehensive Income Components	Income Statement Line Item	Three Months Ended March 31,	
		2018	2017
Unrealized gain on marketable securities and restricted investments	Other income, net	$19,470	$ 46
Total amount reclassified		$19,470	$ 46

17. Segment Reporting

We operate our business in two segments. Our modules segment involves the design, manufacture, and sale of cadmium telluride (“CdTe”) solar modules, which convert sunlight into electricity. Third-party customers of our modules segment include integrators and operators of PV solar power systems. Our second segment is our fully integrated systems segment, through which we provide complete turn-key PV solar power systems, or solar solutions, that draw upon our capabilities, which include (i) project development, (ii) EPC services, and (iii) O&M services. We may provide our full EPC services or any combination of individual products and services within our EPC capabilities depending upon the customer and market opportunity. All of our systems segment products and services are for PV solar power systems, which primarily use our solar modules, and we sell such products and services to utilities, independent power producers, commercial and industrial companies, and other system owners. Additionally within our systems segment, we may temporarily own and operate certain of our systems for a period of time based on strategic opportunities or market factors.

Beginning with the three months ended December 31, 2017, we changed the composition of our reportable segments to align with revisions to our internal reporting structure and long-term strategic plans. As a result of this change, our modules segment, which was historically referred to as our components segment, includes module sales to third parties and excludes any module sales to our systems segment. Previously, we included an allocation of net sales value for all solar modules manufactured by our modules segment and installed in projects sold or built by our

systems segment in the net sales of our modules segment. Our systems segment now includes all net sales from the sale of solar power systems and related products and services, including any modules installed in such systems and any revenue from energy generated by such systems. All prior period balances were revised to conform to the current year presentation.

Table of Contents

See Note 22. “Segment and Geographical Information” in our Annual Report on Form 10-K for the year ended December 31, 2017 for a complete discussion of our segment reporting.

The following tables present certain financial information for our reportable segments for the three months ended March 31, 2018 and 2017 and as of March 31, 2018 and December 31, 2017 (in thousands):

	Three Months Ended March 31, 2018			Three Months Ended March 31, 2017		
	Modules	Systems	Total	Modules	Systems	Total
Net sales	$161,293	$405,972	$567,265	$71,138	$820,653	$891,791
Gross profit	10,278	162,520	172,798	10,135	74,049	84,184
Depreciation and amortization expense	9,249	5,278	14,527	22,499	5,898	28,397

	March 31, 2018			December 31, 2017		
	Modules	Systems	Total	Modules	Systems	Total
Goodwill	$14,462	$—	$14,462	$14,462	$—	$14,462

Table of Contents

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, as amended (the "Exchange Act"), and the Securities Act of 1933, as amended (the "Securities Act"), 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: effects resulting from certain module manufacturing changes and associated restructuring activities; 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 (including estimated future module collection and recycling costs), warranties, solar module technology and cost reduction roadmaps, restructuring, product reliability, investments in unconsolidated affiliates, and capital expenditures; our ability to continue to reduce the cost per watt of our solar modules; the impact of public policies, such as tariffs or other trade remedies imposed on solar cells and modules; effects resulting from pending litigation; our ability to expand manufacturing capacity worldwide; our ability to reduce the costs to develop and construct PV solar power systems; research and development ("R&D") 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," "seek," "believe," "forecast," "foresee," "likely," "may," "should," "goal," "target," "might," "will," "could," "predict," "continue," and the negat these words, and other comparable terminology. Forward-looking statements are only predictions based on our current expectations and our projections about future events. All forward-looking statements included in this Quarterly Report on Form 10-Q are based upon information available to us as of the filing date of this Quarterly Report on Form 10-Q and therefore speak only as of the filing date. 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, whether as a result of new information, future developments, or otherwise. 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, 2017, elsewhere in this Quarterly Report on Form 10-Q, and our other reports filed with the Securities and Exchange Commission (the "SEC"). You should carefully consider the risks and uncertainties described under these sections.

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our condensed consolidated financial statements and the related notes thereto included in this Quarterly Report on Form 10-Q. Unless expressly stated or the context otherwise requires, the terms "the Company," "we," "us," "our," and "First Solar" refer to First Solar, Inc. and its consolidated subsidiaries. When referring to our manufacturing capacity, total sales, and solar module sales, the unit of electricity in watts for megawatts ("MW") and gigawatts ("GW") is direct current ("DC" or "$_{DC}$") unless otherwise noted. When referring to our projects or systems, the unit of electricity in watts for MW and GW is alternating current ("AC" or "$_{AC}$") unless otherwise noted.

Table of Contents

Executive Overview

We are a leading global provider of comprehensive PV solar energy solutions. We design, manufacture, and sell PV solar modules with an advanced thin film semiconductor technology and also develop, design, construct, and sell PV solar power systems that primarily use the modules we manufacture. Additionally, we provide O&M services to system owners. We have substantial, ongoing R&D efforts focused on module and system-level innovations. We are the world's largest thin film PV solar module manufacturer and one of the world's largest PV solar module manufacturers. Our mission is to provide cost-advantaged solar technology through innovation, customer engagement, industry leadership, and operational excellence.

Certain of our financial results and other key operational developments for the three months ended March 31, 2018 include the following:

- Net sales for the three months ended March 31, 2018 decreased by 36% to $567.3 million compared to $891.8 million for the same period in 2017. The decrease in net sales was primarily due to the sale of the Moapa project during the three months ended March 31, 2017, partially offset by the sale of certain India projects and the Rosamond project in 2018 and an increase in third-party module sales.

- Gross profit for the three months ended March 31, 2018 increased 21.1 percentage points to 30.5% from 9.4% for the same period in 2017. The increase in gross profit was driven by the settlement of a tax examination with the state of California, which affected our estimates of sales and use taxes due for certain projects, and a mix of higher gross profit projects sold during the period.

- As of March 31, 2018, we had 2.8 GW of installed annual production capacity at our manufacturing facilities in Perrysburg, Ohio and Kulim, Malaysia. We produced 0.5 GW of solar modules during the three months ended March 31, 2018, which represented a 32% decrease from the same period in 2017. The decrease in production was primarily driven by our previously announced plans to ramp down production of our Series 4 modules and transition to Series 6 module manufacturing over the next several years. We expect to produce approximately 3 GW of solar modules during 2018, including approximately 1 GW of Series 6 modules.

- In March 2018, we completed certain internal qualification procedures for our Series 6 modules at our manufacturing facility in Perrysburg, Ohio, and in April 2018, we commenced commercial production of Series 6 modules at the facility. We also expect to commence commercial production of Series 6 modules at our Kulim, Malaysia and Ho Chi Minh City, Vietnam manufacturing facilities later in 2018.

Market Overview

The solar industry continues to be characterized by intense pricing competition, both at the module and system levels. In particular, module average selling prices in the United States and several other key markets have experienced an accelerated decline in recent years, and module average selling prices are expected to continue to decline globally to some degree in the future. In the aggregate, we believe manufacturers of solar cells and modules have significant installed production capacity, relative to global demand, and the ability for additional capacity expansion. We believe the solar industry may from time to time experience periods of structural imbalance between supply and demand (i.e., where production capacity exceeds global demand), and that such periods will put pressure on pricing. Additionally, intense competition at the system level may result in an environment in which pricing falls rapidly, thereby further increasing demand for solar energy solutions but constraining the ability for project developers, EPC companies, and vertically-integrated solar companies such as First Solar to sustain meaningful and consistent profitability. In light of such market realities, we are focusing on our strategies and points of differentiation, which include our advanced module and system technologies, our manufacturing process, our vertically-integrated business model, our financial

viability, and the sustainability advantage of our modules and systems.

Table of Contents

Worldwide solar markets continue to develop, in part aided by demand elasticity resulting from declining industry average selling prices, both at the module and system levels, which make solar power more affordable. We are developing, constructing, and operating multiple solar projects around the world as we continue to execute on our advanced-stage utility-scale project pipeline. We expect a significant portion of our future consolidated net sales, operating income, and cash flows to be derived from such projects. We also continue to develop our early-to-mid-stage project pipeline and evaluate acquisitions of projects to further expand both our early-to-mid-stage and advanced-stage project pipelines. See the tables under "Management's Discussion and Analysis of Financial Condition and Results of Operations – Systems Project Pipeline" for additional information about projects within our advanced-stage project pipeline.

Lower industry module and system pricing, while currently challenging for certain module manufacturers (particularly manufacturers with high cost structures), is expected to continue to contribute to diversification in global electricity generation and further demand for solar energy solutions. Over time, we believe that solar energy generation will experience widespread adoption in those applications where it competes economically with traditional forms of energy generation. In the near term, however, declining average selling prices are expected to adversely affect our results of operations relative to prior years. If competitors reduce pricing to levels below their costs; bid aggressively low prices for module sale agreements, EPC agreements, and PPAs; 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. In certain markets in California and elsewhere, an oversupply imbalance at the grid level may further reduce short-to-medium term demand for new solar installations relative to prior years, lower PPA pricing, and lower margins on module and system sales to such markets. We continue to mitigate these uncertainties in part by executing on our module technology improvements, including our transition to Series 6 module manufacturing, continuing the development of key markets, and implementing certain other cost reduction initiatives, including both manufacturing, BoS, and other operating costs.

We face intense competition from manufacturers of crystalline silicon solar modules and developers of solar power projects. Solar module manufacturers compete with one another on price and on several module value attributes, including conversion efficiency, energy yield, and reliability, and developers of systems compete on various factors such as net present value, return on equity, and levelized cost of electricity ("LCOE"), meaning the net present value of a system's total life cycle costs divided by the quantity of energy that is expected to be produced over the system's life. As noted above, competition on the basis of selling price per watt has intensified in recent years, which has contributed to declines in module average selling prices in several key markets. Many crystalline silicon cell and wafer manufacturers continue to transition from lower efficiency Back Surface Field ("BSF") multi-crystalline cells (the legacy technology against which we have generally competed in our markets) to higher efficiency Passivated Emitter Rear Contact ("PERC") multi-crystalline and mono-crystalline cells at competitive cost structures.

Additionally, while conventional solar modules, including the solar modules we produce, are monofacial, meaning their ability to produce energy is a function of direct and diffuse irradiance on their front side, certain manufacturers of mono-crystalline PERC solar modules are pursuing the commercialization of bifacial modules that also capture diffuse irradiance on the back side of a module. We believe the cost effective manufacture of bifacial PERC modules is being enabled by the expansion of inexpensive crystal growth and diamond wire saw capacity in China. Bifaciality compromises nameplate efficiency, but by converting both front and rear side irradiance, such technology can improve the overall energy production of a module relative to nameplate efficiency when applied in certain applications and BoS configurations, which could potentially lower the overall LCOE of a system when compared to systems using conventional solar modules, including the modules we produce.

We believe we are among the lowest cost module manufacturers in the solar industry on a module cost per watt basis, based on publicly available information. This cost competitiveness allows us to compete favorably in markets where pricing for modules and fully integrated PV solar power systems is highly competitive. Our cost competitiveness is

based in large part on our module conversion efficiency, proprietary manufacturing technology (which enables us to produce a CdTe module in less than 3.5 hours using a continuous and highly automated industrial manufacturing process, as opposed to a batch process), and our operational excellence. In addition, our CdTe modules use approximately 1-2% of the amount of semiconductor material that is used to manufacture traditional crystalline silicon solar modules. The

Table of Contents

cost of polysilicon is a significant driver of the manufacturing cost of crystalline silicon solar modules, and the timing and rate of change in the cost of silicon feedstock and polysilicon could lead to changes in solar module pricing levels. Polysilicon costs have declined in recent years, and polysilicon consumption per cell has been reduced through various initiatives, such as the adoption of diamond wire saw technology, contributing to a decline in our relative manufacturing cost competitiveness over traditional crystalline silicon module manufacturers.

Given the smaller size (sometimes referred to as form factor) of our current Series 4 modules compared to certain types of crystalline silicon modules, we may incur higher labor and BoS costs associated with the construction of systems using our Series 4 modules. Thus, to compete effectively on an LCOE basis, our Series 4 modules may need to maintain a certain cost advantage per watt compared to crystalline silicon-based modules with larger form factors. Our next generation Series 6 module technology is expected to enable the production of modules with a larger form factor along with better product attributes and a lower manufacturing cost structure. Accordingly, the larger form factor and design of our Series 6 modules is expected to reduce the number of electrical connections and hardware required for system installation. The resulting labor and material savings are expected to represent a significant improvement compared to current technologies and a substantial reduction in total installed system costs resulting in improved project returns as BoS costs represent a significant portion of the costs associated with the construction of a typical utility-scale system.

In terms of energy yield, in many climates, our CdTe modules provide a significant energy production advantage over most conventional crystalline silicon solar modules (including BSF and PERC technologies) of equivalent efficiency rating. For example, our CdTe solar modules provide a superior temperature coefficient, which results in stronger system performance in typical high insolation climates as the majority of a system's generation, on average, occurs when module temperatures are well above 25°C (standard test conditions). In addition, our CdTe modules provide a superior spectral response in humid environments where atmospheric moisture alters the solar spectrum relative to laboratory standards. Our CdTe solar modules also provide a better shading response than conventional crystalline silicon solar modules, which may lose up to three times as much power as CdTe solar modules when shading occurs. As a result of these and other factors, our PV solar power systems typically produce more annual energy in real world field conditions than competing systems with the same nameplate capacity.

While our modules and systems are generally competitive in cost, reliability, and performance attributes, there can be no guarantee such competitiveness will continue to exist in the future to the same extent or at all. Any declines in the competitiveness of our products could result in additional margin compression, further declines in the average selling prices of our modules and systems, erosion in our market share for modules and systems, and/or declines in overall net sales. We continue to focus on enhancing the competitiveness of our solar modules and systems by accelerating progress along our module technology and cost reduction roadmaps, continuing to make technological advances at the system level, using innovative installation techniques and know-how, and leveraging volume procurement around standardized hardware platforms.

Certain Trends and Uncertainties

We believe that our operations may be favorably or unfavorably impacted by the following trends and uncertainties that may affect our financial condition and results of operations. See Item 1A. "Risk Factors" of our Annual Report on Form 10-K and Item 1A. of this Quarterly Report on Form 10-Q for the year ended December 31, 2017 for discussions of other risks (the "Risk Factors") that may affect our financial condition and results of operations.

Our long-term strategic plans are focused on our goal to create long-term shareholder value through a balance of growth, profitability, and liquidity. In executing such plans, we are focusing on providing utility-scale PV solar energy solutions using our modules in key geographic markets that we believe have a compelling need for mass-scale PV electricity, including markets throughout the Americas, the Asia-Pacific region, and certain other strategic markets.

Additionally, we are focusing on opportunities in which our PV solar energy solutions can compete directly with traditional forms of energy generation on an LCOE or similar basis, or complement such generation offerings. Our focus on our core module and utility-scale offerings exists within a current market environment that includes rooftop and distributed generation solar, particularly in the United States. While it is unclear how rooftop and distributed generation solar might

Table of Contents

impact our core utility-scale based offerings in the next several years, we believe that utility-scale solar will continue to be a compelling solar offering for companies with technology and cost leadership and will continue to represent an increasing portion of the overall electricity generation mix. Additionally, our ability to provide utility-scale offerings on economically attractive terms depends, in part, on certain market factors outside of our control, such as interest rate fluctuations, domestic or international trade policies, and government support programs. Adverse changes in these factors could increase the cost of utility-scale systems, which could reduce demand for such systems and limit the number of potential buyers.

We are closely evaluating and managing the appropriate level of resources required as we pursue the most advantageous and cost effective projects and partnerships in our key markets. We have dedicated, and intend to continue to dedicate, significant capital and human resources to reduce the total installed cost of PV solar energy, to optimize the design and logistics around our PV solar energy solutions, and to ensure that our solutions integrate well into the overall electricity ecosystem of each specific market. We expect that, over time, the majority of our consolidated net sales, operating income, and cash flows will come from solar offerings in the key geographic markets described above. The timing, execution, and financial impacts of our long-term strategic plans are subject to risks and uncertainties, as described in the Risk Factors. We are focusing our resources in those markets and energy applications in which solar power can be a least-cost, best-fit energy solution, particularly in regions with significant current or projected electricity demand, relatively high existing electricity prices, strong demand for renewable energy generation, and high solar resources.

Creating or maintaining a market position in certain strategically targeted markets and energy applications also requires us to adapt to new and changing market conditions. For example, our offerings from time to time may need to be competitively priced at levels associated with minimal gross profit margins, which may adversely affect our results of operations. We expect the profitability associated with our various sales offerings to vary from one another over time, and possibly vary from our internal long-range profitability expectations and targets, depending on the market opportunity and the relative competitiveness of our offerings compared with other energy solutions, traditional or otherwise, that are available to potential customers. In addition, as we execute on our long-term strategic plans, we will continue to monitor and adapt to any changing dynamics in emerging technologies, such as commercially viable energy storage solutions, which are expected to further enable PV solar power systems to compete with traditional forms of energy generation by shifting the delivery of energy generated by such systems to periods of greater demand. Storage solutions continue to evolve in terms of technology and cost, and global deployments of storage capacity are expected to exceed 100 GW by 2030, representing a significant increase in the potential market for renewable energy. We will also continue to monitor and adapt to changing dynamics in the market set of potential buyers of solar projects. Market environments with few potential project buyers and a higher cost of capital would generally exert downward pressure on the potential revenue from the solar projects we are developing, whereas, conversely, market environments with many potential project buyers and a lower cost of capital would likely have a favorable impact on the potential revenue from such solar projects.

On occasion, we may temporarily own and operate certain systems with the intention to sell them at a later date. We may also elect to construct and temporarily retain ownership interests in partially contracted or uncontracted systems for which there is a partial or no PPA with an offtaker, such as a utility, but rather an intent to sell a portion of or all the electricity produced by the system on an open contract basis until the system is sold. Expected revenue from projects without a PPA for the full offtake of the system is subject to greater variability and uncertainty based on market factors and is typically lower than projects with a fully contracted PPA. Additionally, our joint ventures and other business arrangements with strategic partners have and may in the future result in us temporarily retaining a noncontrolling ownership interest in the underlying systems projects we develop, supply modules to, or construct, potentially for a period of up to several years. In each of the above mentioned examples, we may retain such ownership interests in a consolidated or unconsolidated separate entity.

We continually evaluate forecasted global demand, competition, and our addressable market and seek to effectively balance manufacturing capacity with market demand and the nature and extent of our competition. In July 2017, we announced plans to utilize our previously idled Vietnamese manufacturing plant for production of our next generation Series 6 module technology. This decision is expected to provide us with several operational benefits, including (i) the

Table of Contents

ability to add additional Series 6 production lines without ramping down current Series 4 production, (ii) flexibility in production capacity during our Series 6 transition period, and (iii) installing Series 6 production lines in a facility that is substantially identical to our Malaysian manufacturing plant where such lines are currently being installed, which is expected to accelerate and facilitate a cost-effective installation. In December 2017, we announced plans to construct a second and identical Series 6 manufacturing plant adjacent to our existing Vietnamese manufacturing plant. In April 2018, we announced plans to construct an additional Series 6 manufacturing plant in Lake Township, Ohio, a short distance from our manufacturing plant in Perrysburg, Ohio. Our Vietnamese plants, recently announced second U.S. plant, and any other potential investments to add or otherwise modify our manufacturing capacity in response to market demand and competition may require significant internal and possibly external sources of liquidity and may be subject to certain risks and uncertainties described in the Risk Factors, including those described under the headings "Our future success depends on our ability to effectively balance manufacturing production with market demand, convert existing production facilities to support new product lines, such as our transition to Series 6 module manufacturing, and, when necessary, continue to build new manufacturing plants over time in response to such demand and add production lines in a cost-effective manner, all of which are subject to risks and uncertainties" and "If any future production lines are not built in line with our committed schedules, it may impair any future growth plans. If any future production lines do not achieve operating metrics similar to our existing production lines, our solar modules could perform below expectations and cause us to lose customers."

8point3 Energy Partners LP

In June 2015, the Partnership completed its IPO. As part of the offering, we contributed interests in various projects to a subsidiary of the Partnership in exchange for an ownership interest in the entity. Since the formation of the Partnership, the Sponsors have, from time to time, sold interests in solar projects to the Partnership, which owns and operates a portfolio of solar energy generation projects.

In February 2018, we entered into an agreement with CD Clean Energy and Infrastructure V JV, LLC, an equity fund managed by Capital Dynamics and certain other co-investors and other parties, pursuant to which such parties agreed to acquire our interests in the Partnership and its subsidiaries (the "Proposed Transactions"). In connection with the Proposed Transactions, we entered into a separate agreement with Capital Dynamics and certain other parties, whereby we and SunPower agreed, among other things, to vote to approve the merger agreement at any meeting of shareholders of the Partnership for such purpose, as shareholders of the Partnership and holders of equity units in OpCo. At the closing of the Proposed Transactions (the "Closing"), the Sponsors, as holders of common and subordinated units (each an "OpCo Unit") in OpCo, will receive cash consideration of $12.35 for each issued and outstanding OpCo Unit. Such amount excludes any applicable withholding taxes and shall be adjusted (i) upward for cash generated from December 1, 2017 through the Closing based on the expected daily cash flow accrual applicable for the quarter and (ii) downward for the amount of distributions declared (to the extent that the record date has passed prior to the Closing) or paid prior to the Closing. As consideration required by SunPower for agreeing to enter into the Proposed Transactions, the Sponsors have agreed that First Solar would pay SunPower additional consideration from the proceeds it receives at the Closing. As a result of such agreement, prior to the payment of fees and expenses related to the Proposed Transactions or any of the adjustments described above, we expect to receive aggregate consideration of approximately $242.8 million (or $10.98 per OpCo Unit) and SunPower is expected to receive aggregate consideration of approximately $387.1 million (or $13.40 per OpCo Unit). In addition, upon Closing, the outstanding balance on the promissory note we received as part of the consideration for the sale of our remaining 34% interest in the 300 MW Desert Stateline project to OpCo will be repaid.

For additional information on the Partnership, see the Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2017 and "Note 9. Equity Method Investments – 8point3 Operating Company, LLC" of our condensed consolidated financial statements.

48

Table of Contents

Systems Project Pipeline

The following tables summarize, as of April 26, 2018, our approximately 2.3 GW advanced-stage project pipeline. The actual volume of modules installed in our projects will be greater than the project size in MW_{AC} as module volumes required for a project are based upon MW_{DC}, which will be greater than the MW_{AC} size pursuant to a DC-AC ratio typically ranging from 1.2 to 1.3. Such ratio varies across different projects due to various system design factors. Projects are typically removed from our advanced-stage project pipeline tables below once we substantially complete construction of the project and after substantially all of the associated project revenue is recognized. Projects, or portions of projects, may also be removed from the tables below in the event an EPC-contracted or partner-developed project does not obtain permitting or financing, a project is not able to be sold due to the changing economics of the project or other factors, or we decide to temporarily own and operate, or retain interests in, such project based on strategic opportunities or market factors.

Projects under Sales Agreements
(Includes uncompleted sold projects, projects under sales contracts subject to conditions precedent, and EPC agreements, including partner developed projects that we will be or are constructing.)

Project/Location	Project Size in MW_{AC}	PPA Contracted Partner	EPC Contract/Partner Developed Project	Expected Year Revenue Recognition Will Be Completed	% of Revenue Recognized as of March 31, 2018
California Flats, California	280	PG&E / Apple (1)	Capital Dynamics	2018	72%
Phoebe, Texas	250	(2)	Longroad Energy Holdings	2019	—%
Rosamond, California	150	SCE	(3)	2018	16%
Balm Solar, Florida	74	(2)	Tampa Electric Company	2018	—%
Payne Creek, Florida	70	(2)	Tampa Electric Company	2018	11%
Grange Hall, Florida	61	(2)	Tampa Electric Company	2019	—%
Troy Solar, Indiana	51	(2)	Southern Indiana Gas and Electric Company	2020	—%
Total	936				

Table of Contents

Projects with Executed PPAs Not Under Sales Agreements

Project/Location	Project Size in MW_{AC}	PPA Contracted Partner	Fully Permitted	Expected or Actual Substantial Completion Year	% Complete as of March 31, 2018
Twiggs County Solar, Georgia	200	Georgia Power Company	No	2019/2020	5%
Sun Streams, Arizona	150	SCE	Yes	2019	10%
Southwestern U.S.	150	(3)	Yes	2020/2021	4%
Luz del Norte, Chile	141	(4)	Yes	2016	100%
American Kings Solar, California	123	SCE	No	2020	16%
Willow Springs, California	100	SCE	Yes	2018	21%
Sunshine Valley, Nevada	100	SCE	Yes	2019	4%
Japan (multiple locations)	84	(5)	No	2019/2020	22%
Sun Streams 3, Arizona	65	APS	Yes	2020	1%
Beryl, Australia	61	(3)	Yes	2019	2%
Ishikawa, Japan	59	Hokuriku Electric Power Company	Yes	2018	58%
Manildra, Australia	49	EnergyAustralia	Yes	2018	62%
Little Bear, California	40	Marin Clean Energy (6)	No	2020	5%
Miyagi, Japan	40	Tohoku Electric Power Company	No	2020	12%
India (multiple locations)	40	(7)	Yes	2017	100%
Total	1,402				

(1) PG&E – 150 MW_{AC} and Apple Energy, LLC – 130 MW_{AC}

(2) Utility-owned generation

(3) Contracted but not specified

(4) Approximately 70 MW_{AC} of the plant's capacity is contracted under PPAs

(5) Hokuriku Electric Power Company and Tokyo Electric Power Company

(6) Expandable to 160 MW_{AC}, subject to satisfaction of certain PPA contract conditions

(7) Gulbarga Electricity Supply Co. – 20 MW_{AC} and Chamundeshwari Electricity Supply Co. – 20 MW_{AC}

Table of Contents

Results of Operations

The following table sets forth our condensed consolidated statements of operations as a percentage of net sales for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,	
	2018	2017
Net sales	100.0 %	100.0 %
Cost of sales	69.5 %	90.6 %
Gross profit	30.5 %	9.4 %
Selling, general and administrative	7.2 %	5.4 %
Research and development	3.6 %	2.6 %
Production start-up	6.5 %	0.1 %
Restructuring and asset impairments	— %	2.2 %
Operating income (loss)	13.1 %	(0.9)%
Foreign currency (loss) gain, net	(0.4)%	— %
Interest income	2.1 %	0.7 %
Interest expense, net	(0.9)%	(1.0)%
Other income, net	3.2 %	2.9 %
Income tax expense	(2.0)%	(0.6)%
Equity in earnings, net of tax	(0.3)%	(0.1)%
Net income	14.6 %	1.0 %

Segment Overview

We operate our business in two segments. Our modules segment involves the design, manufacture, and sale of CdTe solar modules to third parties, and our systems segment includes the development, construction, operation, maintenance, and sale of PV solar power systems, including any modules installed in such systems and any revenue from energy generated by such systems. See Note 17. “Segment Reporting” to our condensed consolidated financial statements for more information on our operating segments. See also Item 2. “Management’s Discussion and Analysis of Financial Condition and Results of Operations – Systems Project Pipeline” for a description of the system projects in our advanced-stage project pipeline.

Beginning with the three months ended December 31, 2017, we changed the composition of our reportable segments to align with revisions to our internal reporting structure and long-term strategic plans. As a result of this change, our modules segment, which was historically referred to as our components segment, includes module sales to third parties and excludes any module sales to our systems segment. Previously, we included an allocation of net sales value for all solar modules manufactured by our modules segment and installed in projects sold or built by our systems segment in the net sales of our modules segment. Our systems segment now includes all net sales from the sale of solar power systems and related products and services, including any modules installed in such systems and any revenue from energy generated by such systems. All prior period balances were revised to conform to the current year presentation.

Table of Contents

Net sales

Modules Business

We generally price and sell our solar modules per watt of nameplate power. During the three months ended March 31, 2018, we sold the majority of our solar modules to integrators and operators of systems in the United States, Australia, and Malaysia, and substantially all of our modules business net sales were denominated in U.S. dollars. We recognize revenue for module sales at a point in time following the transfer of control of such products to the customer, which typically occurs upon shipment or delivery depending on the terms of the underlying contracts.

Systems Business

Through our fully integrated systems business, we provide complete turn-key PV solar power systems, or solar solutions, that draw upon our capabilities, which include (i) project development, (ii) EPC services, and (iii) O&M services. Additionally within our systems segment, we may temporarily own and operate certain of our systems for a period of time based on strategic opportunities or market factors. We typically recognize revenue for sales of solar power systems using cost based input methods, which result in revenue being recognized as work is performed based on the relationship between actual costs incurred compared to the total estimated costs for a given contract. We may also recognize revenue for the sale of a system after the project has been completed due to the timing of when we enter into the associated sales contract with the customer.

The following table shows net sales by reportable segment for the three months ended March 31, 2018 and 2017:

(Dollars in thousands)	Three Months Ended March 31, 2018	2017	Three Month Change	
Modules	$161,293	$71,138	$90,155	127 %
Systems	405,972	820,653	(414,681)	(51)%
Net sales	$567,265	$891,791	$(324,526)	(36)%

Net sales from our modules segment increased $90.2 million for the three months ended March 31, 2018 compared to the three months ended March 31, 2017 primarily due to a 203% increase in the volume of watts sold, partially offset by a 25% decrease in the average selling price per watt. Net sales from our systems segment decreased $414.7 million for the three months ended March 31, 2018 compared to the three months ended March 31, 2017 primarily as a result of the sale of the Moapa project in 2017, partially offset by the sale of certain India projects and the Rosamond project in 2018.

Cost of sales

Modules Business

Our modules business cost of sales includes the cost of raw materials and components for manufacturing solar modules, such as glass, transparent conductive coatings, CdTe and other thin film semiconductors, laminate materials, connector assemblies, and edge seal materials. In addition, our cost of sales includes direct labor for the manufacturing of solar modules and manufacturing overhead, such as engineering, equipment maintenance, quality and production control, and information technology. Our cost of sales also includes depreciation of manufacturing plant and equipment, facility-related expenses, environmental health and safety costs, and costs associated with shipping, warranties, and solar module collection and recycling (excluding accretion).

52

Table of Contents

Systems Business

For our systems business, project-related costs include development costs (legal, consulting, transmission upgrade, interconnection, permitting, and other similar costs), EPC costs (consisting primarily of solar modules, inverters, electrical and mounting hardware, project management and engineering costs, and construction labor costs), and site specific costs.

The following table shows cost of sales by reportable segment for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,			
(Dollars in thousands)	2018	2017	Three Month Change	
Modules	$151,015	$61,003	$90,012	148 %
Systems	243,452	746,604	(503,152)	(67)%
Total cost of sales	$394,467	$807,607	$(413,140)	(51)%
% of net sales	69.5 %	90.6 %		

Our cost of sales decreased $413.1 million, or 51%, and decreased 21.1 percentage points as a percent of net sales for the three months ended March 31, 2018 compared to the three months ended March 31, 2017. The decrease in cost of sales was driven by a $503.2 million decrease in our systems segment cost of sales primarily due to the size of projects sold or under construction during the period and a mix of higher gross profit projects. This decrease in cost of sales was partially offset by a $90.0 million increase in our modules segment cost of sales primarily as a result of higher costs of $116.4 million from the increased volume of modules sold directly to third parties, partially offset by continued reductions in the cost per watt of our solar modules, which decreased cost of sales by $24.2 million.

Gross profit

Gross profit may be affected by numerous factors, including the selling prices of our modules and systems, our manufacturing costs, project development costs, BoS costs, the capacity utilization of our manufacturing facilities, and foreign exchange rates. Gross profit may also be affected by the mix of net sales from our modules and systems businesses.

The following table shows gross profit for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,			
(Dollars in thousands)	2018	2017	Three Month Change	
Gross profit	$172,798	$84,184	$88,614	105%
% of net sales	30.5 %	9.4 %		

Gross profit increased 21.1 percentage points to 30.5% during the three months ended March 31, 2018 from 9.4% during the three months ended March 31, 2017 due to the settlement of a tax examination with the state of California, which affected our estimates of sales and use taxes due for certain projects, and a mix of higher gross profit projects sold during the period. See Note 12. “Revenue from Contracts with Customers” to our condensed consolidated financial statements for additional information on the settlement of the tax examination.

Selling, general and administrative

Selling, general and administrative expense consists primarily of salaries and other personnel-related costs, professional fees, insurance costs, travel expenses, and other business development and selling expenses.

Table of Contents

The following table shows selling, general and administrative expense for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,		
(Dollars in thousands)	2018	2017	Three Month Change
Selling, general and administrative	$41,126	$48,199	$(7,073) (15)%
% of net sales	7.2 %	5.4 %	

Selling, general and administrative expense for the three months ended March 31, 2018 decreased compared to the three months ended March 31, 2017 primarily due to lower business development expenses and lower professional fees.

Research and development

Research and development expense consists primarily of salaries and other personnel-related costs; the cost of products, materials, and outside services used in our process and product R&D activities; and depreciation and amortization expense associated with R&D specific facilities and equipment. 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 systems.

The following table shows research and development expense for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,		
(Dollars in thousands)	2018	2017	Three Month Change
Research and development	$20,324	$22,799	$(2,475) (11)%
% of net sales	3.6 %	2.6 %	

The decrease in research and development expense for the three months ended March 31, 2018 compared to the three months ended March 31, 2017 was primarily due to reduced material and module testing costs during our transition to Series 6 module manufacturing.

Production start-up

Production start-up expense consists primarily of employee compensation and other costs associated with 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 and applicable facility related costs. Costs related to equipment upgrades and implementation of manufacturing process improvements are also included in production start-up expense as well as costs related to the selection of a new site, related legal and regulatory costs, and costs to maintain our plant replication program to the extent we cannot capitalize these expenditures. In general, we expect production start-up expense per production line to be higher when we build an entirely new manufacturing facility compared with the addition or replacement of production lines at an existing manufacturing facility, primarily due to the additional infrastructure investment required when building an entirely new facility.

The following table shows production start-up expense for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,	
(Dollars in thousands)	2018	2017

			Three Month Change	
Production start-up	$37,084	$1,150	$35,934	3,125%
% of net sales	6.5 %	0.1 %		

Table of Contents

During the three months ended March 31, 2018, we incurred production start-up expense for the transition to Series 6 module manufacturing at our facilities in Perrysburg, Ohio and Kulim, Malaysia, and the commencement and expansion of operations at our previously idled manufacturing facility in Ho Chi Minh City, Vietnam.

Restructuring and asset impairments

Restructuring and asset impairments consists of expenses incurred related to material restructuring initiatives and includes any associated asset impairments, costs for employee termination benefits, costs for contract terminations and penalties, and other restructuring related costs. Such restructuring initiatives are intended to align the organization with then current business conditions and to reduce costs.

The following table shows restructuring and asset impairments for the three months ended March 31, 2018 and 2017:

(Dollars in thousands)	Three Months Ended March 31, 2018	2017	Three Month Change
Restructuring and asset impairments	$—	$20,031	$(20,031) (100)%
% of net sales	—%	2.2 %	

During the three months ended March 31, 2017 we incurred $20.0 million of restructuring and asset impairment charges associated with our transition to Series 6 module manufacturing. Such charges included net losses on the disposition of previously impaired Series 4 and Series 5 manufacturing equipment, severance benefits to terminated employees, and net miscellaneous charges, primarily related to contract terminations, the write-off of operating supplies, and other Series 4 manufacturing exit costs. See Note 3. “Restructuring and Asset Impairments” to our condensed consolidated financial statements for additional information.

Foreign currency (loss) gain, net

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

The following table shows foreign currency (loss) gain, net for the three months ended March 31, 2018 and 2017:

(Dollars in thousands)	Three Months Ended March 31, 2018	2017	Three Month Change
Foreign currency (loss) gain, net	$(2,517)	$246	$(2,763) 1,123%

Foreign currency loss for the three months ended March 31, 2018 increased compared to the three months ended March 31, 2017 primarily due to the weakening of the U.S. dollar relative to certain foreign currencies during the three months ended March 31, 2017, which resulted in a net foreign currency gain in the prior period.

Interest income

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

The following table shows interest income for the three months ended March 31, 2018 and 2017:

(Dollars in thousands)	Three Months Ended March 31, 2018	2017	Three Month Change	
Interest income	$11,824	$6,417	$5,407	84%

Table of Contents

Interest income for the three months ended March 31, 2018 increased compared to the three months ended March 31, 2017 primarily due to higher balances of cash and cash equivalents during the period and increased interest rates associated with such balances.

Interest expense, net

Interest expense, net is primarily comprised of interest incurred on long-term debt, settlements of interest rate swap contracts, and changes in the fair value of interest rate swap contracts that do not qualify for hedge accounting in accordance with ASC 815. We may capitalize interest expense into our project assets or property, plant and equipment when such costs qualify for interest capitalization, which reduces the amount of net interest expense reported in any given period.

The following table shows interest expense, net for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,			
(Dollars in thousands)	2018	2017	Three Month Change	
Interest expense, net	$(5,182)	$(9,169)	$3,987	(43)%

Interest expense, net for the three months ended March 31, 2018 decreased compared to the three months ended March 31, 2017 primarily due to certain changes in the fair value of interest rate swap contracts during the three months ended March 31, 2017, which do not qualify for hedge accounting, and higher interest costs capitalized to certain projects under construction, partially offset by higher levels of project specific debt financings.

Other income, net

Other income, net is primarily comprised of miscellaneous items and realized gains and losses on the sale of marketable securities and restricted investments.

The following table shows other income, net for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,			
(Dollars in thousands)	2018	2017	Three Month Change	
Other income, net	$17,934	$25,861	$(7,927)	(31)%

Other income, net decreased for the three months ended March 31, 2018 compared to the three months ended March 31, 2017 primarily due to a $26.8 million settlement from the resolution of an outstanding matter with a former customer during the three months ended March 31, 2017, partially offset by realized gains of $19.5 million during the three months ended March 31, 2018 from the sale of certain restricted investments.

Income tax expense

In December 2017, the U.S. President signed into law the Tax Act, which significantly revised U.S. tax law by, among other things, lowering the statutory federal corporate income tax rate from 35% to 21% for tax years beginning after December 31, 2017, eliminating certain deductions, imposing a mandatory one-time transition tax on certain accumulated earnings and profits of foreign corporate subsidiaries, introducing new tax regimes, and changing how

foreign earnings are subject to U.S. tax.

Table of Contents

During 2017, we recognized certain provisional tax expenses associated with the Tax Act. The final effects of the Tax Act may differ from such provisional amounts, possibly materially, due to, among other things, changes in interpretations of the Tax Act, any legislative action to address questions that arise because of the Tax Act, any changes in accounting standards for income taxes or related interpretations in response to the Tax Act, any updates or changes to estimates utilized to calculate provisional amounts, or actions we may take as a result of the Tax Act. The associated accounting for the Tax Act is expected to be completed when our 2017 U.S. corporate income tax return is filed in late 2018.

Income tax expense or benefit, deferred tax assets and liabilities, and liabilities for unrecognized tax benefits reflect our best estimate of current and future taxes to be paid. We are subject to income taxes in both the U.S. and numerous foreign jurisdictions in which we operate, principally Australia, India, and Malaysia. Significant judgments and estimates are required to determine our consolidated income tax expense. The statutory federal corporate income tax rate in the U.S. decreased from 35% to 21% beginning in January 2018, while the tax rates in Australia, India, and Malaysia are 30%, 34.6%, and 24%, 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, conditional upon our continued compliance with certain employment and investment thresholds.

The following table shows income tax expense for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,			
(Dollars in thousands)	2018	2017	Three Month Change	
Income tax expense	$(11,625)	$(5,679)	$(5,946)	105%
Effective tax rate	12.1 %	37.0 %		

Our tax rate is affected by recurring items, such as tax rates in foreign jurisdictions and the relative amounts of income we earn in those jurisdictions. The rate is also affected by discrete items that may occur in any given period, but are not consistent from period to period. Income tax expense increased by $5.9 million during the three months ended March 31, 2018 compared to the three months ended March 31, 2017 primarily due to higher pretax income and accruals of interest and penalties for certain of our uncertain tax positions, partially offset by higher excess tax benefits associated with share-based compensation.

Equity in earnings, net of tax

Equity in earnings, net of tax represents our proportionate share of the earnings or losses from equity method investments as well as any gains or losses on the sale or disposal of such investments.

The following table shows equity in earnings of unconsolidated affiliates, net of tax for the three months ended March 31, 2018 and 2017:

	Three Months Ended March 31,			
(Dollars in thousands)	2018	2017	Three Month Change	
Equity in earnings, net of tax	$(1,747)	$(552)	$(1,195)	216%

Equity in earnings, net of tax for the three months ended March 31, 2018 decreased compared to the three months ended March 31, 2017 primarily due to lower equity in earnings from our investment in 8point3 Operating Company, LLC.

57

Table of Contents

Critical Accounting Policies and Estimates

In preparing our condensed consolidated financial statements in conformity with U.S. GAAP, we make estimates and assumptions that affect the amounts of reported assets, liabilities, revenues, and expenses, as well as the disclosure of contingent liabilities. Some of our accounting policies require the application of significant judgment in the selection of the appropriate assumptions for making these estimates. By their nature, these judgments are subject to an inherent degree of uncertainty. We base our judgments and estimates on our historical experience, our forecasts, and other available information as appropriate. We believe the judgments and estimates involved in over time revenue recognition, accrued solar module collection and recycling, product warranties, accounting for income taxes, long-lived asset impairments, and testing goodwill for impairment have the greatest potential impact on our condensed consolidated financial statements. The actual results experienced by us may differ materially and adversely from our estimates. To the extent there are material differences between our estimates and the actual results, our future results of operations will be affected.

For a description of the accounting policies that require the most significant judgment and estimates in the preparation of our condensed consolidated financial statements, refer to our Annual Report on Form 10-K for the year ended December 31, 2017. There have been no material changes to our accounting policies during the three months ended March 31, 2018.

Recent Accounting Pronouncements

See Note 2. “Recent Accounting Pronouncements” to our condensed consolidated financial statements for a summary of recent accounting pronouncements.

Liquidity and Capital Resources

As of March 31, 2018, we believe that our cash, cash equivalents, marketable securities, cash flows from operating activities, advanced-stage project pipeline, availability under our Revolving Credit Facility considering minimum liquidity covenant requirements, and access to the capital markets will be sufficient to meet our working capital, systems project investment, and capital expenditure needs for at least the next 12 months. We monitor our working capital to ensure we have adequate liquidity, both domestically and internationally.

We intend to maintain appropriate debt levels based upon cash flow expectations, our overall cost of capital, and expected cash requirements for operations, capital expenditures, and strategic discretionary spending. In the future, we may also engage in additional debt or equity financings, including project specific debt financings. We believe that when necessary, we will have adequate access to the capital markets, although our ability to raise capital on terms commercially acceptable to us could be constrained if there is insufficient lender or investor interest due to industry-wide or company-specific concerns. Such financings could result in increased debt service expenses, dilution to our existing stockholders, or restrictive covenants which could restrain our ability to pursue our strategic plans. As of March 31, 2018, we were in compliance with the covenants for all of our long-term debt facilities.

As of March 31, 2018, we had $2.9 billion in cash, cash equivalents, and marketable securities compared to $3.0 billion as of December 31, 2017. Cash, cash equivalents, and marketable securities as of March 31, 2018 decreased primarily as a result of purchases of property, plant and equipment, partially offset by a reimbursement of overfunded amounts from our module collection and recycling trust. As of March 31, 2018 and December 31, 2017, $1.6 billion of our cash, cash equivalents, and marketable securities was held by our foreign subsidiaries and was primarily based in U.S. dollar, Indian rupee, and Euro denominated holdings and U.S. dollar, Euro, and Malaysian ringgit denominated holdings, respectively.

We utilize a variety of tax planning and financing strategies in an effort to ensure that our worldwide cash is available in the locations in which it is needed. If certain international funds were needed for our operations in the U.S., we may be required to accrue and pay certain U.S. and foreign taxes to repatriate such funds. Although we maintain the intent

Table of Contents

and ability to permanently reinvest our accumulated earnings outside of the U.S., with the exception of our subsidiaries in Canada and Germany, we continue to evaluate how the Tax Act may affect our plans to repatriate additional amounts to fund our domestic operations or otherwise deploy our worldwide cash. In addition, changes to foreign government banking regulations may restrict our ability to move funds among various jurisdictions under certain circumstances, which could negatively impact our access to capital, resulting in an adverse effect on our liquidity and capital resources.

Our systems business requires significant liquidity and is expected to continue to have significant liquidity requirements in the future. The net amount of our project assets and related portion of deferred revenue, which approximates our net capital investment in the development and construction of systems projects, was $0.4 billion as of March 31, 2018. Solar power project development and construction cycles, which span the time between the identification of a site location and the commercial operation of a system, vary substantially and can take many years to mature. As a result of these long project cycles and strategic decisions to finance the construction of certain projects using our working capital, we may need to make significant up-front investments of resources in advance of the receipt of any cash from the sale of such projects. Delays in construction progress or in completing the sale of our systems projects that we are self-financing may also impact our liquidity. We have historically financed these up-front systems project investments primarily using working capital. In certain circumstances, we may need to finance construction costs exclusively using working capital, if project financing becomes unavailable due to market-wide, regional, or other concerns.

From time to time, we develop projects in certain markets around the world where we may hold all or a significant portion of the equity in a project for several years. Given the duration of these investments and the currency risk relative to the U.S. dollar in some of these markets, we continue to explore local financing alternatives. Should these financing alternatives be unavailable or too cost prohibitive, we could be exposed to significant currency risk and our liquidity could be adversely impacted.

Additionally, we may elect to retain an ownership interest in certain systems projects after they become operational if we determine it would be of economic and strategic benefit to do so. If, for example, we cannot sell a systems project at economics that are attractive to us or potential customers are unwilling to assume the risks and rewards typical of PV solar power system ownership, we may instead elect to temporarily own and operate such systems until we can sell the systems on economically attractive terms. The decision to retain ownership of a system impacts liquidity depending upon the size and cost of the project. As of March 31, 2018, we had $0.4 billion of net PV solar power systems that had been placed in service, primarily in international markets. We have elected, and may in the future elect, to enter into temporary or long-term project financing to reduce the impact on our liquidity and working capital with regards to such projects and systems. We may also consider entering into tax equity or other arrangements with respect to ownership interests in certain of our projects, which could cause a portion of the economics of such projects to be realized over time.

The following additional considerations have impacted or may impact our liquidity for the remainder of 2018 and beyond:

- We expect to make significant capital investments over the next several years as we transition our production to Series 6 module technology and purchase the related manufacturing equipment and infrastructure. These investments also include the commencement and expansion of operations at our existing manufacturing plant in Vietnam and the construction of an additional U.S. manufacturing plant in Lake Township, Ohio. We expect the aggregate capital investment for currently planned Series 6 related programs to be approximately $1.8 billion, including $0.6 billion of capital expenditures already made as of March 31, 2018. These capital investments are expected to provide an annual Series 6 manufacturing capacity of approximately 6.6 GW once completed. During the remainder of 2018, we expect to spend $650 million to $750 million for capital expenditures, the majority of which is associated with the Series 6

transition. We believe these capital expenditures will over time increase our aggregate manufacturing capacity, reduce our manufacturing costs, increase our solar module conversion efficiencies, and reduce the overall cost of systems using our modules.

Table of Contents

- Our failure to obtain raw materials and components that meet our quality, quantity, and cost requirements in a timely manner could interrupt or impair our ability to manufacture our solar modules or increase our manufacturing costs. Accordingly, we may enter into long-term supply agreements to mitigate potential risks related to the procurement of key raw materials and components, and such agreements may be noncancelable or cancelable with a significant penalty. In March 2018, we entered into a 10-year supply agreement for the purchase of cover glass for our PV solar modules. Under the terms of the agreement, we expect to pay approximately $500 million over the 10-year supply period, which is scheduled to begin by January 2020.

- The balance of our solar module inventories and BoS parts was $170.4 million as of March 31, 2018. As we continue to develop and construct our advanced-stage project pipeline, we must produce solar modules and procure BoS parts in volumes sufficient to support our planned construction schedules. As part of this construction cycle, we typically produce or procure these inventories in advance of receiving payment for such materials, which may temporarily reduce our liquidity. Once solar modules and BoS parts are installed in a project, they are classified as either project assets, PV solar power systems, or cost of sales depending on whether the project is subject to a definitive sales contract and whether other revenue recognition criteria have been met. We also produce significant volumes of modules for sale directly to third-parties, which requires us to carry inventories at levels sufficient to satisfy the demand of our customers and the needs of their utility-scale projects, which may also temporarily reduce our liquidity.

- We may commit working capital during the remainder of 2018 and beyond to acquire solar power projects in various stages of development, including advanced-stage projects with PPAs, and to continue developing those projects as necessary. Depending upon the size and stage of development, the costs to acquire such solar power projects could be significant. When evaluating project acquisition opportunities, we consider both the strategic and financial benefits of any such acquisitions.

- We have initiatives in several markets to expedite our penetration of those markets and establish relationships with potential customers. Some of these arrangements may involve significant investments or other allocations of capital that could reduce our liquidity or require us to pursue additional sources of financing, assuming such sources are available to us. Additionally, we have elected and may in the future elect or be required to temporarily retain a noncontrolling ownership interest in certain underlying systems projects we develop, supply modules to, or construct. Any such retained ownership interest is expected to impact our liquidity to the extent we do not obtain new sources of capital to fund such investments.

Cash Flows

The following table summarizes the key cash flow activity for the three months ended March 31, 2018 and 2017 (in thousands):

	Three Months Ended March 31,	
	2018	2017
Net cash (used in) provided by operating activities	$(45,286)	$493,144
Net cash used in investing activities	(374,689)	(293,190)
Net cash provided by financing activities	42,156	102,164
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(5,074)	(7,307)
Net (decrease) increase in cash, cash equivalents and restricted cash	$(382,893)	$294,811

Operating Activities

The decrease in net cash provided by operating activities was primarily driven by the sale of the Moapa project during the three months ended March 31, 2017 and lower net sales during the three months ended March 31, 2018.

Table of Contents

Investing Activities

The increase in net cash used in investing activities was primarily due to an increase in purchases of property, plant and equipment driven by our transition to Series 6 module manufacturing.

Financing Activities

The decrease in net cash provided by financing activities was primarily the result of lower net proceeds from borrowings under our long-term debt arrangements associated with the construction of certain projects in Japan, India, and Australia and lower proceeds from commercial letters of credit for the construction of certain projects in India.

Contractual Obligations

Our contractual obligations have not materially changed since December 31, 2017 with the exception of borrowings under project specific debt financings, a glass supply agreement entered into in March 2018, and other changes in the ordinary course of business. See Note 10. “Debt” and Note 11. “Commitments and Contingencies” to our condensed consolidated financial statements for more information related to the changes in our long-term debt and purchase commitments, respectively. See also our Annual Report on Form 10-K for the year ended December 31, 2017 for additional information regarding our contractual obligations.

Off-Balance Sheet Arrangements

As of March 31, 2018, we had no off-balance sheet debt or similar obligations, other than financial assurance related instruments and operating leases, which are not classified as debt. We do not guarantee any third-party debt. See Note 11. “Commitments and Contingencies” to our condensed consolidated financial statements for further information about our financial assurance related instruments.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

There have been no material changes to the information previously provided under Item 7A. of our Annual Report on Form 10-K for the year ended December 31, 2017.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

We carried out an evaluation, under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of our “disclosure controls and procedures” as defined in Exchange Act Rule 13a-15(e) and 15d-15(e). Based on that evaluation, our Chief Executive Officer and Chief Financial Officer concluded that as of March 31, 2018 our disclosure controls and procedures were effective to ensure that information required to be disclosed by us in reports that we file or submit under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

Table of Contents

Changes in Internal Control over Financial Reporting

We also carried out an evaluation, under the supervision and with the participation of management, including our Chief Executive Officer and Chief Financial Officer, of our "internal control over financial reporting" as defined in Exchange Act Rule 13a-15(f) and 15d-15(f) to determine whether any changes in our internal control over financial reporting occurred during the three months ended March 31, 2018 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Based on that evaluation, there were no such changes in our internal control over financial reporting that occurred during the three months ended March 31, 2018.

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 system of controls 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 our 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 also based in part upon 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

See Note 11. "Commitments and Contingencies" under the heading "Legal Proceedings" of our condensed consolidated financial statements for legal proceedings and related matters.

Item 1A. Risk Factors

In addition to the other information set forth in this report, you should carefully consider the factors discussed in Item 1A. "Risk Factors" of our Annual Report on Form 10-K for the year ended December 31, 2017, which could materially affect our business, financial condition, results of operations, or cash flows. The risks described in our Annual Report on Form 10-K are not the only risks we face. Additional risks and uncertainties not currently known to us or that we currently consider immaterial may also materially adversely affect our business, financial condition, results of operations, or cash flows. Except for the updated risk factor appearing below, there have been no material changes in the risk factors contained in our Annual Report on Form 10-K.

62

Table of Contents

We are subject to litigation risks, including securities class actions and stockholder derivative actions, which may be costly to defend and the outcome of which is uncertain.

From time to time, we are subject to legal claims, with and without merit, that may be costly and which may divert the attention of our management and our resources in general. In addition, our projects may be subject to litigation or other adverse proceedings that may adversely impact our ability to proceed with construction or sell a given project, which may adversely affect our ability to recognize revenue with respect to such project. The results of complex legal proceedings are difficult to predict. Moreover, many of the complaints filed against us do not specify the amount of damages that plaintiffs seek, and we therefore are unable to estimate the possible range of damages that might be incurred should these lawsuits be resolved against us. Certain of these lawsuits assert types of claims that, if resolved against us, could give rise to substantial damages, and an unfavorable outcome or settlement of one or more of these lawsuits, or any future lawsuits, may result in a significant monetary judgment or award against us or a significant monetary payment by us, and could have a material adverse effect on our business, financial condition, or results of operations. Even if these lawsuits, or any future lawsuits, are not resolved against us, the costs of defending such lawsuits may be significant, as may be the cost of any settlement, and may exceed the coverage limits of, or may not be covered by, our insurance policies. Because the price of our common stock has been, and may continue to be, volatile, we can provide no assurance that additional securities or other litigation will not be filed against us in the future. See Note 11. “Commitments and Contingencies – Legal Proceedings” to our consolidated financial statements included in this Quarterly Report on Form 10-Q for more information on our legal proceedings, including our securities class action and derivative actions.

Item 5. Other Information

None.

Item 6. Exhibits

The following exhibits are filed with or incorporated by reference into 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 Exchange Act or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act or the Exchange Act, whether made before or after the date hereof and irrespective of any general incorporation language in any filings.

63

Table of Contents

SIGNATURE

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.

Date: April 26, 2018 By: /s/ BRYAN SCHUMAKER
Name: Bryan Schumaker
Title: Chief Accounting Officer