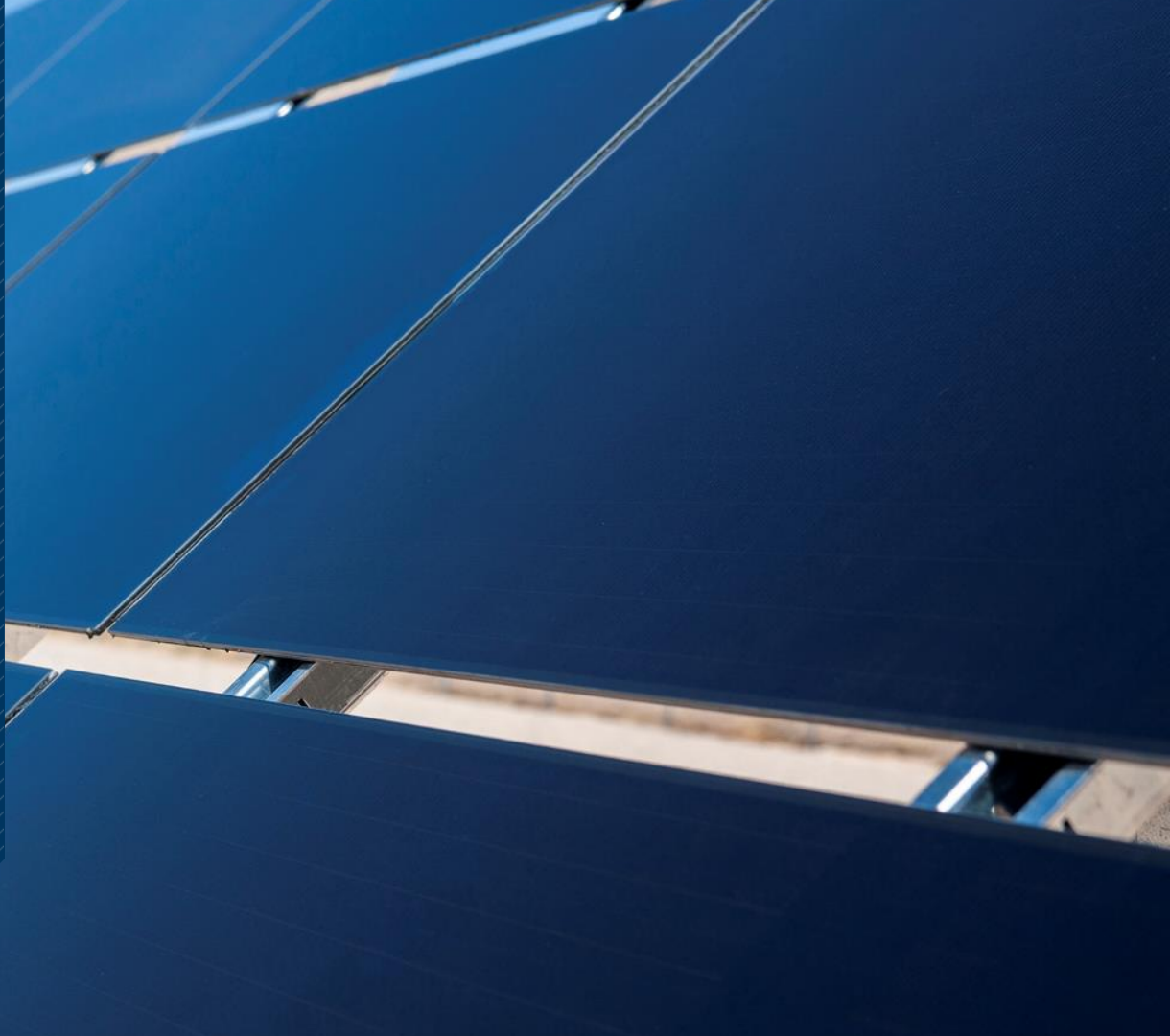


FIRST SOLAR Q2'16 EARNINGS CALL

August 3, 2016



FORWARD-LOOKING STATEMENTS

During the course of this presentation the Company will make projections and other statements that are forward-looking statements within the meaning of the federal securities laws. The forward-looking statements in this presentation are based on current information and expectations, are subject to uncertainties and changes in circumstances, and do not constitute guarantees of future performance. Those statements involve a number of factors that could cause actual results to differ materially from those statements, including the risks as described in the Company's most recent Annual Report on Form 10-K, Quarterly Report on Form 10-Q, and other filings with the Securities and Exchange Commission. First Solar assumes no obligation to update any forward-looking information contained in this presentation or with respect to the announcements described herein.

AGENDA

- Business & Technology Update
- Q2'16 Financial Results
- 2016 Guidance
- Q&A



TECHNOLOGY ADVANTAGE

FIRST SOLAR **S4**
117 W



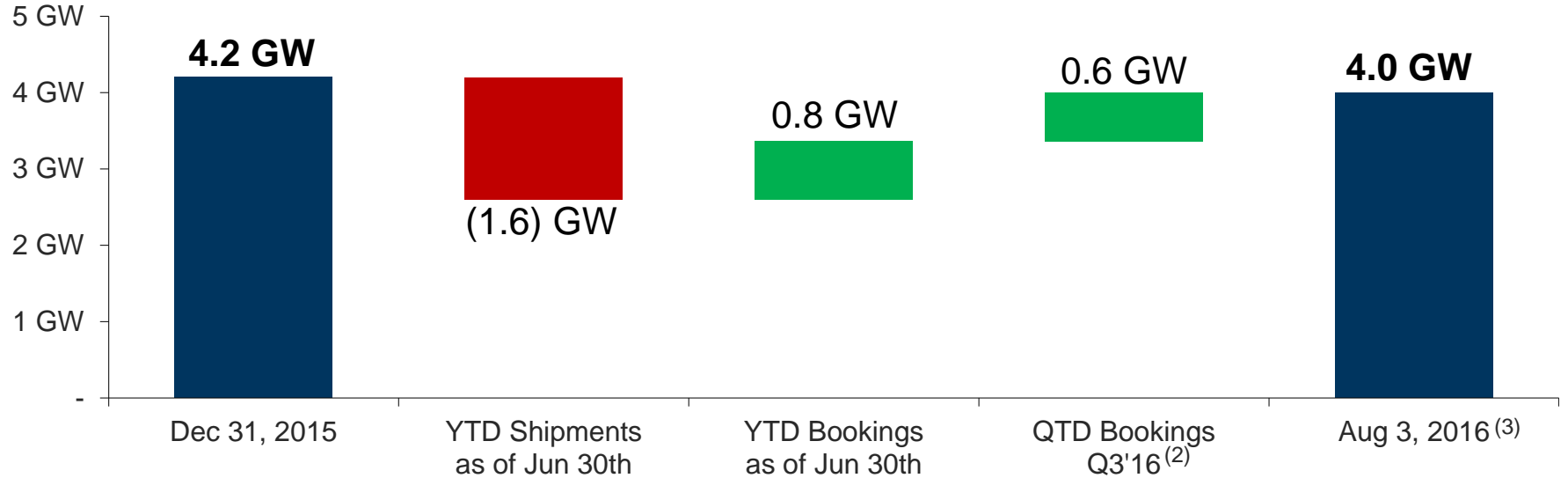
FIRST SOLAR **S5**
365 - 390 W



FIRST SOLAR **S6**
>400 W



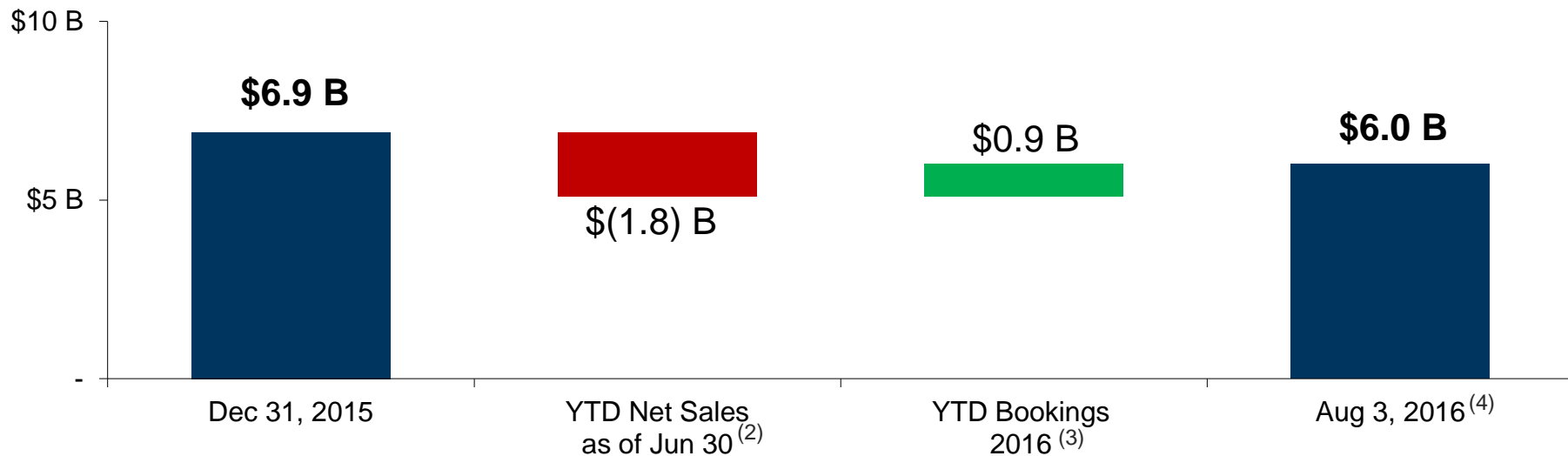
EXPECTED MODULE SHIPMENTS⁽¹⁾ (GW_{DC}): SYSTEMS + THIRD-PARTY MODULE



The above table presents the actual module shipments for 2016 through Jun 30, 2016, new module volume bookings through Aug 3, 2016, and the expected module shipments beyond Jun 30, 2016. A module is considered to be shipped when it leaves one of our manufacturing plants. Expected module shipments do not have a direct correlation to expected revenues as expected module shipments do not represent total systems revenues and do not consider the timing of when all revenue recognition criteria are met including timing of module installation.

- (1) Expected Module Shipments includes systems projects and contracted 3rd party module-only and module plus sales. Systems projects include (a) contracted/sold (b) with PPA but not yet sold and (c) no PPA and not yet sold, but electricity to be sold on an open contract basis.
- (2) Reflects quarter-to-date 2016 additions through Aug 3, 2016.
- (3) Balance includes remaining shipment volumes as of Jun 30, 2016 and bookings through Aug 3, 2016. Shipments from Jul 1 to Aug 3, 2016 not deducted.

EXPECTED REVENUE⁽¹⁾: SYSTEMS + THIRD-PARTY MODULE



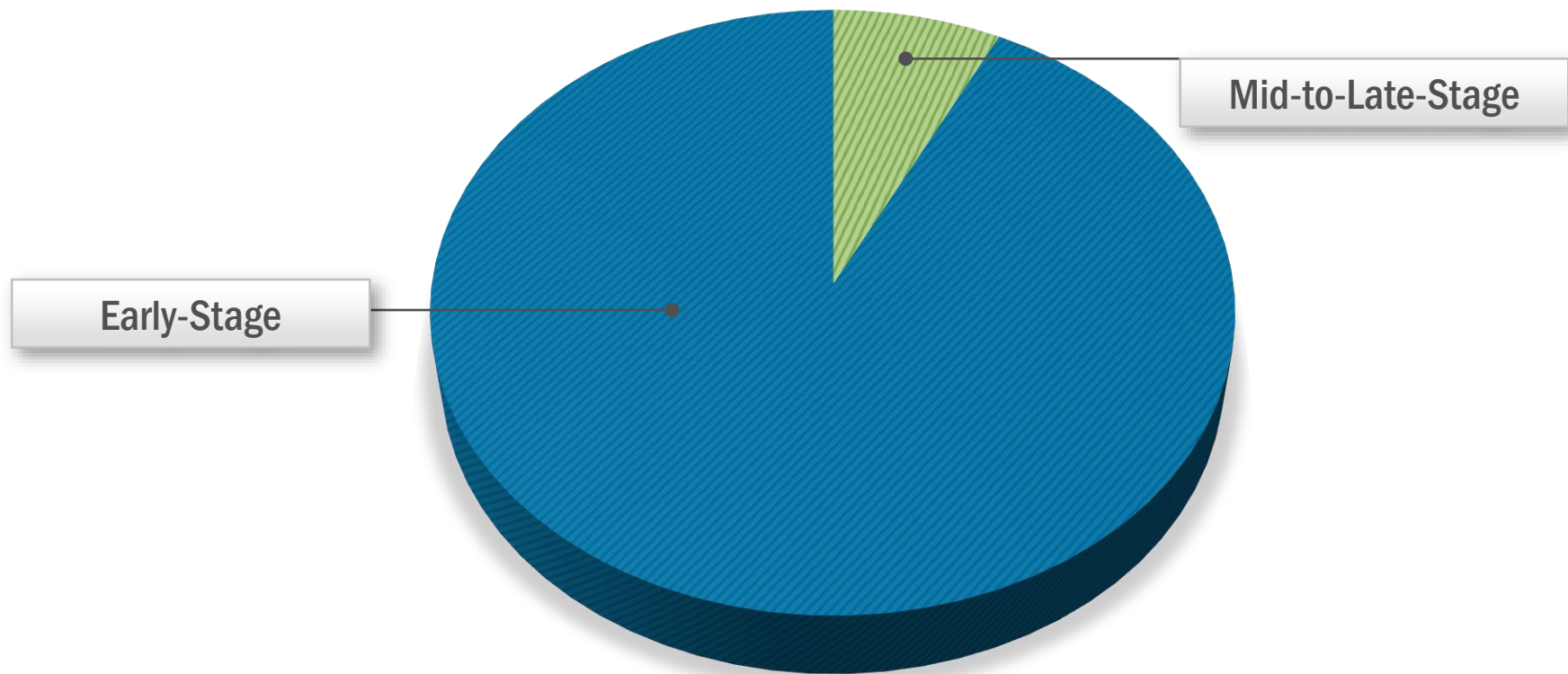
(1) Expected Revenue includes revenue projections from both systems projects and contracted 3rd-party module-only / module plus sales. Systems projects include (a) contracted/sold (b) with PPA but not yet sold and (c) no PPA & not yet sold, but electricity to be sold on an open contract basis. Expected Revenue from projects not yet sold/contracted and with no PPA and not yet sold are based on internal projected selling prices. Excludes O&M & electricity sales revenue.

(2) 2016 Net Sales through Jun 30, 2016 and a \$0.1B reduction related to revised estimates for future expected revenue of certain self-developed projects.

(3) Reflects year-to-date 2016 additions through Aug 3, 2016.

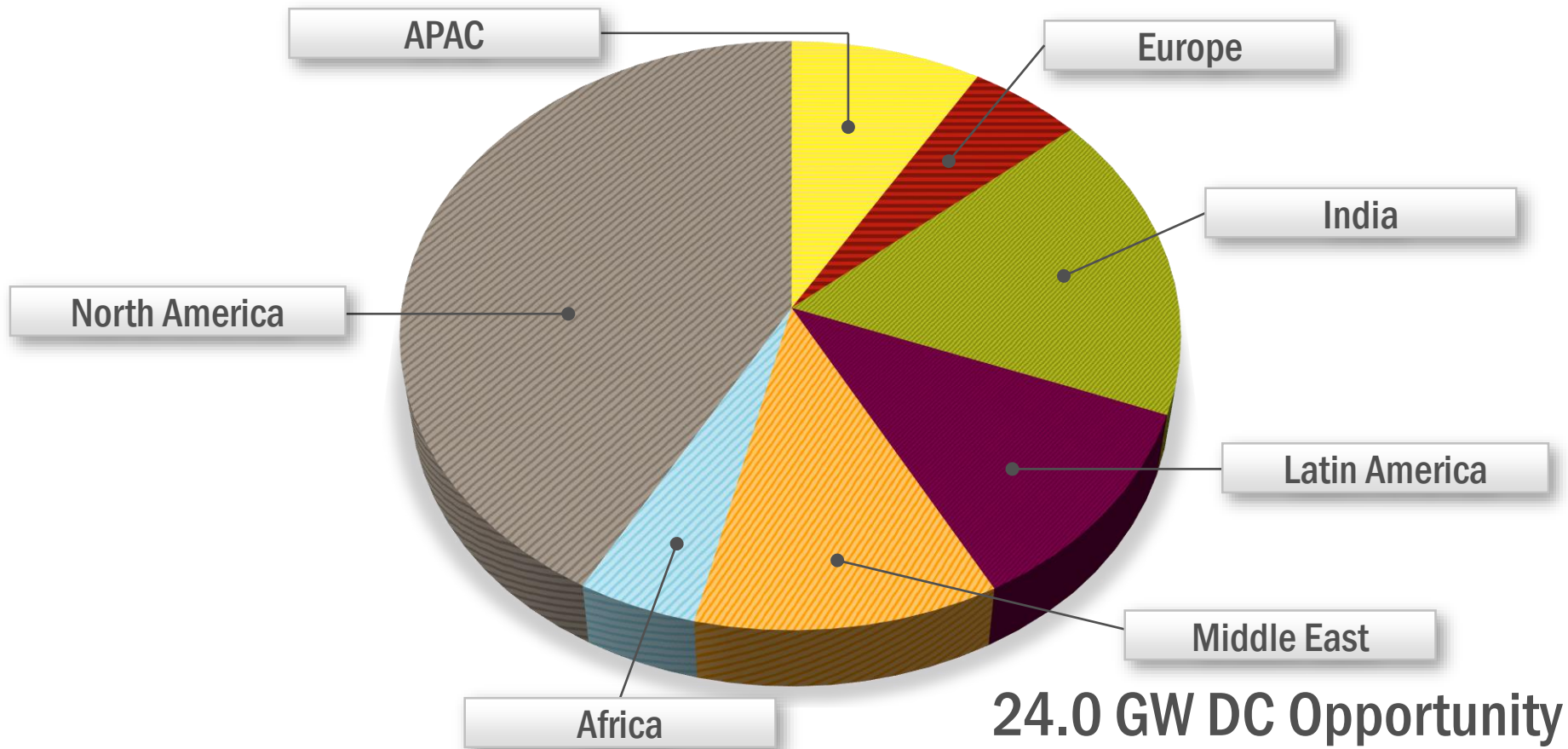
(4) The Aug 3, 2016 balance includes (i) \$0.6B of expected remaining revenues from contracted/sold projects including revenues from projects under construction to the extent that the revenue has not been recognized under GAAP as of Jun 30, 2016 and (ii) expected revenues from contracted 3rd-party module-only and module plus sales, systems projects which have PPAs, but are not yet sold/contracted and systems projects with no PPA and not yet sold, but electricity to be sold on an open contract basis as of Aug 3, 2016. Excludes O&M and electricity sales. Excludes impact of potential adjustments for future YieldCo dropdowns.

POTENTIAL BOOKING OPPORTUNITIES: BY STAGE OF DEVELOPMENT



24.0 GW DC Opportunity

POTENTIAL BOOKING OPPORTUNITIES: BY GEOGRAPHY





Q2 2016 FINANCIAL RESULTS

Alex Bradley, Interim Chief Financial Officer

Q2'16 OPERATIONS OVERVIEW

METRIC	Q2'16	Q2'16 VS Q1'16	Q2'16 VS Q2'15
Production (MW _{DC})	785	1%	39%
Capacity Utilization	100%	Unchanged	15 pts
Conversion Efficiency (Fleet Average)	16.2%	Unchanged	80 bps
Conversion Efficiency (Best Line)	16.4%	Unchanged	20 bps

P&L SUMMARY

Key Income Statement Data

(in millions, except gross profit % and net income per share data)

(Unaudited)

	Q2'16	Q/Q	Y/Y
Net sales	\$934.4	10%	4%
Gross profit %	20.5%	-10.5 ppt	2.1 ppt
Research and development	\$32.9	9%	12%
Selling, general and administrative	\$63.8	-5%	-10%
Restructuring and asset impairments	\$85.5	100%	100%
Operating income	\$8.9	\$(156.4)	\$(48.2)
Other income	\$6.8	\$(28.8)	\$7.6
Income tax expense	\$9.0	\$(24.8)	\$42.3
Net income	\$13.4	\$(157.2)	\$(80.5)
Share count – Diluted	103.9	1%	2%
Net income per share – Diluted	\$0.13	\$(1.53)	\$(0.79)
Non-GAAP net income per share – Diluted ⁽¹⁾	\$0.87	N/A	N/A

(1) Refer to the back of this presentation for GAAP to non-GAAP reconciliation

KEY BALANCE SHEET AND CASH FLOW DATA

	Q2'16	Q1'16	Q/Q
(in millions)			
(Unaudited)			
Assets & Liabilities			
Cash and marketable securities	\$1,667	\$1,881	(\$213)
Accounts receivable, trade	\$369	\$350	\$20
Accounts receivable, unbilled and retainage	\$173	\$87	\$86
Inventories	\$385	\$444	(\$59)
Balance of systems parts	\$93	\$155	(\$62)
Project assets and deferred project costs – current and noncurrent	\$1,360	\$1,507	(\$147)
Restricted cash – current and noncurrent	\$45	\$48	(\$3)
Investments in unconsolidated affiliates and joint ventures	\$427	\$392	\$35
Long-term debt – current and noncurrent	\$233	\$299	(\$66)
Cash Flow			
Net cash provided by operating activities	(\$75)	\$51	(\$126)
Free cash flow ⁽¹⁾	(\$139)	\$13	(\$152)

(1) Refer to the back of this presentation for reconciliation of Operating Cash Flow to Free Cash Flow.

RESTRUCTURING IMPACT & ANNUALIZED SAVINGS

Expected Restructuring Charges

In \$M	Cash	Non-Cash	Total
TetraSun	(\$10 - \$15)	(\$80 - \$85)	(\$90 - \$100)
Other	(\$15 - \$20)	-	(\$15 - \$20)
Total Charges	(\$25 - \$35)	(\$80 - \$85)	(\$105 - \$120)

- \$86 million of restructuring and asset impairment charges, primarily related to TetraSun incurred in Q2 2016
- Majority of remaining charges are expected in Q3 and Q4 2016

Expected Annualized Savings from Restructuring Actions

In \$M	Cash	Non-Cash	Opex	COGS	Total
TetraSun	\$15 - \$20	\$5 - \$10	\$10 - \$15	\$10 - \$15	\$20 - \$30
Other	\$40 - \$45	\$0 - \$5	\$25 - \$30	\$15 - \$20	\$40 - \$50
Annualized Savings	\$55 - \$65	\$5 - \$15	\$35 - \$45	\$25 - \$35	\$60 - \$80

2016 GUIDANCE UPDATE AS OF AUGUST 3, 2016

2016 Guidance	Prior GAAP	Current GAAP	Current Non-GAAP*
Net Sales	\$3.8B to \$4.0B	Unchanged	
Gross Margin (%)	18% to 19%	18.5% to 19%	
Operating Expenses	\$380M to \$400M	\$485M to \$520M	\$380M to \$400M
Operating Income	\$300M to \$370M	\$205M to \$250M	\$310M to \$370M
Effective Tax rate	16% to 18%	4% to 6%	16% to 18%
Earnings Per Share ¹	\$4.10 to \$4.50	\$3.65 to \$3.90	\$4.20 to \$4.50
Net Cash Balance ²	\$1.9B to \$2.2B	Unchanged	
Operating Cash Flow ³	\$500M to \$700M	\$500 to \$650	
Capital Expenditures	\$300M to \$400M	\$275M to \$325M	
Shipments	2.9GW to 3.0GW	Unchanged	

*Note: See table in appendix for reconciliation of GAAP to Non-GAAP items

1. Includes a gain of approximately \$145 million, net of tax, from the expected sale of an equity method investment and our share of 8point3 earnings and a gain in other income of approximately \$20 million, net of tax, from the sale of restricted investments in Q1 2016
2. Defined as cash and marketable securities less expected debt at the end of 2016
3. Excludes approximately \$320 million from the expected sale of an equity method investment treated as an investing cash flow

Q2'16 RESULTS SUMMARY

- **Financial Results**

- Q2 Net Sales of \$934M and Q2 GAAP EPS of \$0.13
- Q2 non-GAAP EPS of \$0.87
- FY 2016 EPS Guidance: GAAP \$3.65 to \$3.90; non-GAAP \$4.20 to \$4.50

- **Technology and Operation Roadmap**

- Full fleet average efficiency of 16.2%
- Lead line average efficiency of 16.4%
- Current lead line efficiency at 16.7%

- **Pipeline Additions**

- Over 1.4 GW DC booked year-to-date 2016
- Potential Booking Opportunities increased to 24GW DC



Q&A

Key Quarterly Financial Data	Q2'15	Q3'15	Q4'15	Q1'16	Q2'16	Q2'16	Q2'16
						Q/Q	Y/Y
(\$ in millions, except gross profit % and net income per share data)							
(Unaudited)							
Net sales	\$ 896.2	\$ 1,271.2	\$ 942.3	\$ 848.5	\$ 934.4	10%	4%
Gross profit %	18.4%	38.1%	24.6%	31.0%	20.5%	-10.5 ppt	2.1 ppt
Research and development	29.5	29.6	36.7	30.2	32.9	9%	12%
Selling, general and administrative	70.9	53.7	62.9	67.5	63.8	-5%	-10%
Production start-up	7.0	3.2	-	-	0.1	100%	-99%
Restructuring and asset impairments	-	-	-	-	85.5	100%	100%
Operating income	57.1	397.8	131.8	165.3	8.9	\$ (156.4)	\$ (48.2)
Income tax (benefit) expense	(33.3)	48.5	(15.3)	33.8	9.0	\$ (24.8)	\$ 42.3
Net income	\$ 93.9	\$ 349.3	\$ 164.1	\$ 170.6	\$ 13.4	\$ (157.2)	\$ (80.5)
Share count - Diluted	101.6	102.3	102.3	102.7	103.9	1%	2%
Net income per share - Diluted	\$ 0.92	\$ 3.41	\$ 1.60	\$ 1.66	\$ 0.13	\$ (1.53)	\$ (0.79)
Share-based compensation expense	\$ 8.9	\$ 12.2	\$ 11.8	\$ 11.5	\$ 7.1	-38%	-20%
Capital expenditures	38.8	45.2	27.2	51.8	78.4	51%	102%
Cash, cash equivalents, and marketable securities	\$ 1,775.2	\$ 1,809.5	\$ 1,830.3	\$ 1,880.5	\$ 1,667.4	-11%	-6%
Supplemental Data							
Net cash (used in) provided by operating activities	\$ (10.4)	\$ 21.0	\$ 53.1	\$ 50.5	\$ (75.3)	\$ (125.8)	\$ (64.9)
+ Excess tax benefits from share-based compensation arrangements	1.9	7.0	(5.6)	13.7	14.4	\$ 0.7	\$ 12.5
- Purchases of solar module collection and recycling restricted investment	-	-	-	-	-	\$ -	\$ -
- Purchases of property, plant and equipment	(38.8)	(45.2)	(27.2)	(51.8)	(78.4)	\$ (26.6)	\$ (39.6)
= Free cash flow **	\$ (47.3)	\$ (17.2)	\$ 20.3	\$ 12.5	\$ (139.3)	\$ (151.8)	\$ (92.0)
MW Produced	562.8	653.8	761.2	774.0	784.8	1%	39%
Average conversion efficiency	15.4%	15.8%	16.1%	16.2%	16.2%	0 bps	80 bps

** Total amounts may not foot due to rounding

USE OF NON-GAAP FINANCIAL MEASURE

In the press release above, we provided non-GAAP earnings per share for the three months ended June 30, 2016. We have included this non-GAAP financial measure to adjust for (i) restructuring and asset impairment charges associated primarily with the end of our crystalline silicon module production, (ii) write-downs of our crystalline silicon module inventories, (iii) contingent consideration adjustments related to the likelihood of achieving certain crystalline silicon module shipment milestones and (iv) the tax benefit associated with these items. We believe non-GAAP earnings per share, when taken together with corresponding GAAP financial measures, to be relevant and useful information to our investors because it provides them with additional information in assessing our financial operating results. Our management uses such non-GAAP financial measures in evaluating our operating performance. However, this measure has limitations, including that it excludes the effect of certain changes to our assets and liabilities and certain amounts that we may ultimately have to pay in cash. Accordingly, this measure that excludes certain restructuring and asset impairment charges should be considered in addition to, and not as a substitute for, or superior to earnings per share prepared in accordance with GAAP. The following is the reconciliation of earnings per share prepared in accordance with GAAP to non-GAAP earnings per share (in millions, except per share amounts):

NON-GAAP EARNINGS PER SHARE

	Three Months Ended June 30, 2016
Net income	\$ 13.4
Restructuring and asset impairments	85.5
Write-downs of crystalline silicon module inventories	8.5
TetraSun contingent consideration adjustments	(7.4)
Tax benefit*	(9.8)
Non-GAAP Net Income	<u>\$ 90.2</u>
Weighted-average number of shares used for diluted earnings per share	103.9
GAAP earnings per share	\$ 0.13
Non-GAAP earnings per share	\$ 0.87

*Restructuring treated as a non-discrete item for tax purposes and will be reflected in the effective tax rate over the duration of 2016. The \$9.8 million benefit is the year-to-date tax impact and full year benefit is approximately \$15 million.

USE OF NON-GAAP FINANCIAL MEASURE

In the press release above, we also provided non-GAAP guidance for our operating expenses, operating income, effective tax rate and earnings per share for the year ending December 31, 2016. We have included these forward-looking non-GAAP financial measures to adjust our GAAP projections of such financial measures for (i) restructuring and asset impairment charges primarily associated with the end of our crystalline silicon operations as described above, (ii) additional restructuring activities expected during the remainder of the year and (iii) the reversal of a liability associated with an uncertain tax position related to the income of a foreign subsidiary. Other GAAP charges, including those related to asset impairments, restructuring programs or litigation that would be excluded from non-GAAP earnings per share are possible for the year ending December 31, 2016, but such amounts are dependent on numerous factors that we currently cannot ascertain with sufficient certainty or are presently unknown. These GAAP charges are also dependent upon future events and valuations that have not yet occurred or been performed. We believe these forward-looking non-GAAP financial measures, when taken together with our corresponding financial guidance based on GAAP, to be relevant and useful information to our investors because they provide them with additional information in assessing our financial operating results. Our management also uses such non-GAAP guidance in evaluating our operating performance. However, such measures have limitations, including that they exclude the effect of certain changes to our assets and liabilities, certain amounts that we may ultimately have to pay in cash and the resolution of certain matters with tax authorities. Accordingly, these forward-looking non-GAAP financial measures that exclude the aforementioned items should be considered in addition to, and not as a substitute for, or superior to financial guidance based on GAAP. The following is the reconciliation of financial guidance based on GAAP to the corresponding non-GAAP information (in millions, except per share amounts):

RECONCILIATION OF GAAP TO NON-GAAP GUIDANCE

	GAAP Guidance	Restructuring Charges ¹	Foreign Tax Benefit ²	Non-GAAP Guidance
Operating Expenses	\$485 to \$520	(\$105 to \$120)	-	\$380 to \$400
Operating Income	\$205 to \$250	\$105 to \$120	-	\$310 to \$370
Effective Tax Rate ³	4% to 6%	\$15 to \$25	\$35	16% to 18%
Earnings per share	\$3.65 to \$3.90	\$0.85 to \$0.90	(\$0.30)	\$4.20 to \$4.50

1. \$90 to \$100 million of restructuring, asset impairment and related charges primarily associated with the end of our crystalline silicon module production and \$15 to \$20 million associated with other actions
2. Expected tax benefit in Q3 2016 from the reversal of a liability associated with an uncertain tax position related to the income of a foreign subsidiary
3. Effective tax rate reconciliation provides the estimated tax benefit associated with restructuring and asset impairment charges and the reversal of an uncertain tax position liability

USE OF NON-GAAP FINANCIAL MEASURE – FREE CASH FLOW

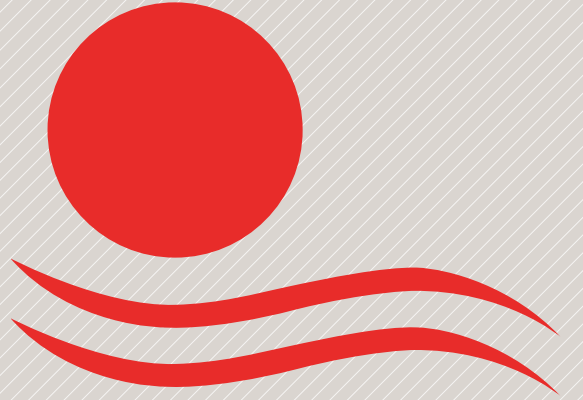
This presentation includes information regarding Free Cash Flow, which is a financial measure not prepared in accordance with U.S. generally accepted accounting principles (GAAP).

Free cash flow is defined as net cash provided by (used in) operating activities plus excess tax benefits from share-based compensation arrangements minus capital expenditures (purchases of property, plant and equipment). The Company uses free cash flow to evaluate its businesses, and this measure is considered an important indicator of the Company's liquidity and ability to pursue opportunities to enhance shareholder value, including its ability to reduce debt and make strategic investments. A general limitation of a free cash flow measure is that it is not prepared in accordance with GAAP and thus may not be comparable to similarly titled measures of other companies due to differences in methods of calculation and excluded items.

Actual Data

\$M	Years Ended*		Quarters Ended									
	2014	2015	Q1'14	Q2'14	Q3'14	Q4'14	Q1'15	Q2'15	Q3'15	Q4'15	Q1'16	Q2'16
	Net cash provided by (used in) operating activities	681.0	(360.9)	(318.2)	118.4	(47.2)	928.0	(424.6)	(10.4)	21.0	53.1	50.5
+ Excess tax benefits from share-based compensation arrangements	31.2	17.7	11.7	4.5	11.7	3.3	14.4	1.9	7.0	(5.6)	13.7	14.4
- Purchases of property, plant and equipment	(257.5)	(166.4)	(50.8)	(62.4)	(71.0)	(73.3)	(55.3)	(38.8)	(45.2)	(27.2)	(51.8)	(78.4)
= Free cash flow	454.6	(509.6)	(357.3)	60.5	(106.6)	858.0	(465.5)	(47.3)	(17.2)	20.3	12.5	(139.3)

*Year ended data may not sum due to rounding



First Solar®