FIRST SOLAR Q3'19 EARNINGS CALL

October 24, 2019

First Solar®

LEADING THE WORLD'S SUSTAINABLE ENERGY FUTURE

IMPORTANT INFORMATION

Cautionary Note Regarding Forward Looking Statements

This presentation contains forward-looking statements which are made pursuant to safe harbor provisions of the Private Securities Litigation Reform Act of 1995. All statements in this presentation, other than statements of historical fact, are forward-looking statements. These forward-looking statements include, but are not limited to, statements 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; our financial guidance for 2019, future financial results, operating results, net sales, revenues, gross margin, operating expenses, operating income, earnings per share, net cash balance, capital expenditures, products, projected costs (including estimated future module collection and recycling costs), warranties, shipments, bookings, booking opportunities, confirmations, supply, production, 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; our ability to expand manufacturing capacity worldwide; our ability to reduce the costs to construct photovoltaic ("PV") solar power systems; research and development ("R&D") programs; sales and marketing initiatives; the impact of U.S. tax reform; and competition. These forward-looking statements are often characterized by the use of 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 negative or plural of these words and other comparable terminology. Forward-looking statements are only predictions based on our current expectations and our projections about future events and therefore speak only as of the date of this presentation. 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: structural imbalances in global supply and demand for PV solar modules; the market for renewable energy, including solar energy; our competitive position and other key competitive factors; reduction, elimination, or expiration of government subsidies, policies, and support programs for solar energy projects; the impact of public policies, such as tariffs or other trade remedies imposed on solar cells and modules; our ability to execute on our long-term strategic plans; our ability to execute on our solar module technology and cost reduction roadmaps; our ability to improve the wattage of our solar modules; interest rate fluctuations and both our and our customers' ability to secure financing; the creditworthiness of our offtake counterparties and the ability of our offtake counterparties to fulfill their contractual obligations to us; the ability of our customers and counterparties to perform under their contracts with us; the satisfaction of conditions precedent in our project sale agreements; our ability to attract new customers and to develop and maintain existing customer and supplier relationships; our ability to successfully develop and complete our systems business projects; our ability to convert existing production facilities to support new product lines, such as Series 6 module manufacturing; general economic and business conditions, including those influenced by U.S., international, and geopolitical events; environmental responsibility, including with respect to cadmium telluride ("CdTe") and other semiconductor materials; claims under our limited warranty obligations; changes in, or the failure to comply with, government regulations and environmental, health, and safety requirements; effects resulting from pending litigation, including the class action lawsuit against us; future collection and recycling costs for solar modules covered by our module collection and recycling program; our ability to protect our intellectual property; our ability to prevent and/or minimize the impact of cyber-attacks or other breaches of our information systems; our continued investment in R&D; the supply and price of components and raw materials, including CdTe; our ability to attract and retain key executive officers and associates; and the matters discussed under the captions "Risk Factors" and "Management's Discussion and Analysis of Financial Conditions and Results of Operations" of our most recent Annual Report on Form 10-K, and our subsequently filed Quarterly Reports on Form 10-Q, as supplemented by our other filings with the Securities and Exchange Commission.

AGENDA

- Business & Technology Update
- Q3’19 Financial Results
- 2019 Guidance
- Q&A

PERRYSBURG 2

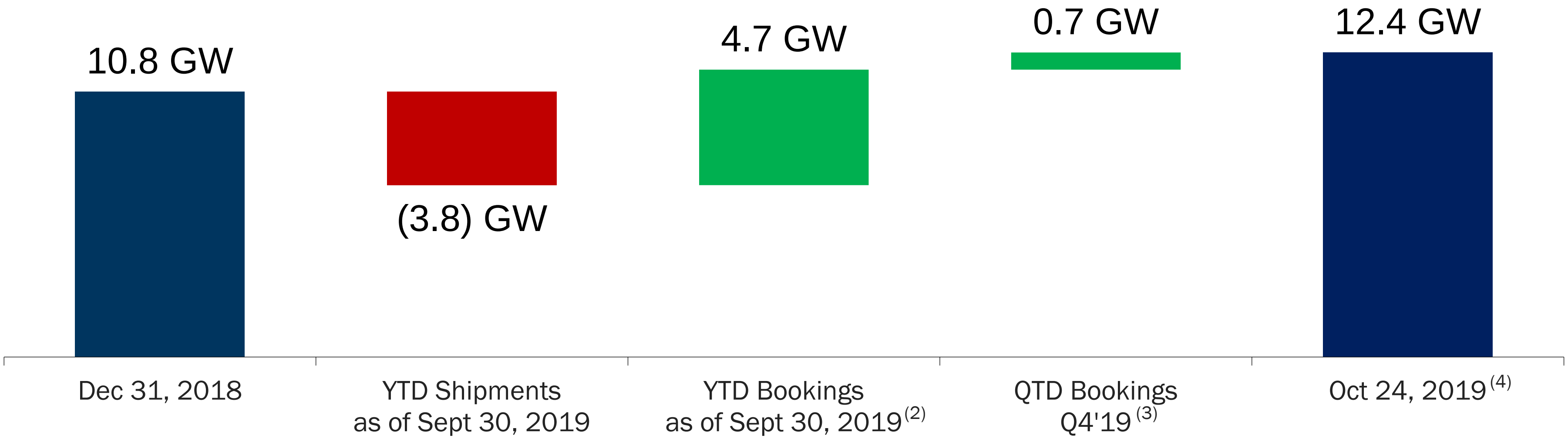
- Commenced production 3 months ahead of schedule
- Ramp expected to be complete by end of first quarter 2020
- Increases current Series 6 nameplate capacity to 5.5 GW

SERIES 6 OPERATIONS UPDATE

METRIC	Fleet Oct MTD[1] vs July 2019
MWs Produced per Day	8%
Capacity Utilization Percentage	6 pts
Yield Percentage	2 pts
Watts per Module	4 W
ARC Utilization	5 pts

(1) Data up to and including 23 October

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



The above table presents the actual module shipments for 2019 through Sept 30, 2019, new module volume bookings through Oct 24, 2019, and the expected module shipments beyond Oct 1, 2019. 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 sales. Systems projects include (a) under sales agreement, (b) executed PPA not under sales agreement and (c) no PPA and not under sales agreement, but electricity to be sold on an open contract basis.

(2) Reflects bookings from Jan 1, 2019 to Sept 30, 2019, reduced by 0.4 GW of debookings.

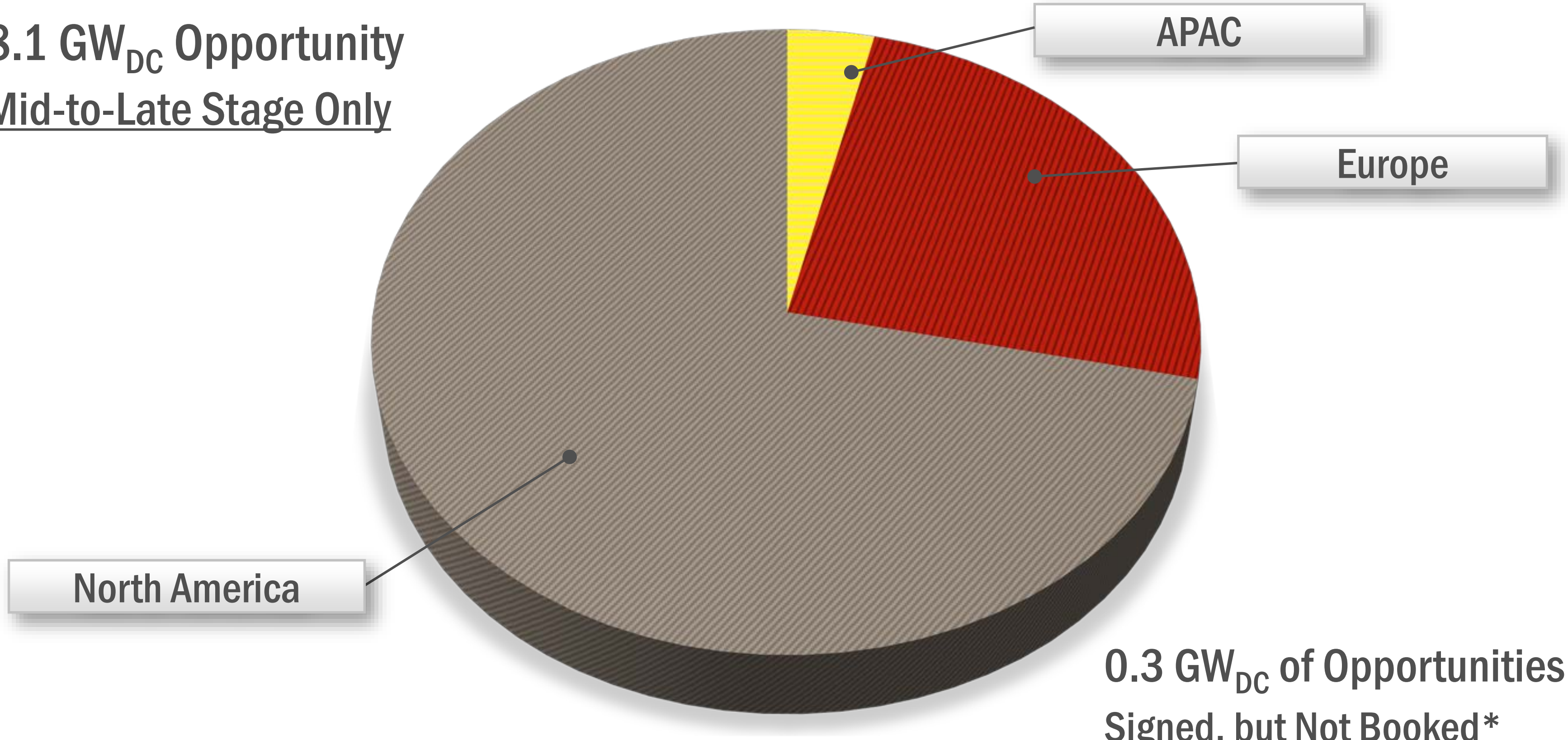
(3) Reflects bookings from Oct 1, 2019 to Oct 24, 2019, reduced by 0.1 GW of debookings.

(4) Balance includes remaining shipment volumes as of Sept 30, 2019 and bookings through Oct 24, 2019. Shipments from Oct 1 to Oct 24, 2019 not deducted.

POTENTIAL BOOKING OPPORTUNITIES: BY GEOGRAPHY

8.1 GW_{DC} Opportunity

Mid-to-Late Stage Only



0.3 GW_{DC} of Opportunities

Signed, but Not Booked*

*0.3GW included in the 8.1 GW total

Q3 2019 FINANCIAL RESULTS

KEY INCOME STATEMENT DATA

(in millions, except gross profit % and net income per share data)	Q3'19	Q/Q	Y/Y
(Unaudited)			
Net sales	$ 546.8	(7%)	(19%)
Gross profit %	25.3%	12.1 ppt	6.2 ppt
Selling, general and administrative	53.5	5%	60%
Research and development	24.9	2%	11%
Production start-up	18.6	8.2	3.9
Operating income	41.3	49.9	(17.2)
Other loss, net	(3.4)	1.0	2.6
Income tax expense	(15.0)	(3.3)	(12.6)
Equity in earnings, net of tax	0.1	0.2	3.3
Net income	$ 30.6	$ 49.2	$ (27.1)
Share count - Diluted	106.2	1%	0%
Net income per share – Diluted	$ 0.29	$ 0.47	$ (0.25)

See our quarterly report for Q3 2019 filed with the SEC for more information regarding our Q3 2019 financial results

KEY BALANCE SHEET AND CASH FLOW DATA

(in millions) (Unaudited)	Q3'19	Q2'19	Q/Q
Assets & Liabilities			
Cash, cash equivalents, marketable securities, and restricted cash	$ 1,637.1	$ 2,141.1	$ (504.0)
Accounts receivable trade, net	367.3	269.5	97.8
Accounts receivable, unbilled and retainage	165.0	128.0	37.0
Inventories — current	576.8	586.6	(9.8)
Balance of systems parts	68.9	91.7	(22.8)
PV solar power systems, net	484.6	304.7	179.9
Project assets — current and noncurrent	572.1	529.9	42.2
Long-term debt — current and noncurrent	480.3	481.3	(1.0)
Cash Flow			
Net cash provided by (used in) operating activities	$ (317.6)	$ 13.5	$ (331.1)

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2019 GUIDANCE AS OF OCT 24, 2019

	Prior	Current
Net Sales	\$3.5B to \$3.7B	Unchanged
Gross Margin (%)[1]	18.5% to 19.5%	19% to 20%
Operating Expenses[2]	\$360M to \$380M	\$350M to \$370M
Operating Income	\$290M to \$340M	\$320M to \$370M
Earnings Per Share	\$2.25 to \$2.75	Unchanged
Net Cash Balance[3]	\$1.7B to \$1.9B	Unchanged
Capital Expenditures	\$650M to \$750M	Unchanged
Shipments	5.4GW to 5.6GW	Unchanged

1. Includes \$70 to \$80 million of ramp costs (\$60 to \$70 million previously)
2. Includes \$40 to \$50 million of production start-up expense (\$55 to \$65 million previously)
3. Defined as cash, restricted cash and marketable securities less expected debt at the end of 2019

SUMMARY & HIGHLIGHTS

BOOKINGS:

- 1.1 GW_{DC} booked since previous earnings call in August
- 5.4 GW_{DC} booked year-to-date 2019
- 8.1 GW_{DC} of mid-to-late stage opportunities

SERIES 6:

- Perrysburg 2 commenced operations 3 months ahead of schedule
- Fleet efficiency, throughput, yield and cost improving

FINANCIALS:

- Maintain 2019 full year Revenue and EPS guidance
- 2019 year end Net Cash guidance of $1.7 to $1.9 billion

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