



# First Solar Q2'23 Earnings Call

July 27, 2023



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: demand for our technology, our business strategy, including anticipated trends and developments in and management plans for our business and the markets in which we operate; our ability to upgrade and expand manufacturing capacity worldwide, including investment in a new U.S. manufacturing facility; increased research and development (“R&D”) programs and investment; our ability to integrate recent strategic acquisitions, including Evolar; a new Series 7 product, including module/day capacity and top production bin; results of our Copper Replacement (“CuRe”) program; the production of bifacial modules; our financial guidance for 2023, including future financial results, operating results, net sales, gross margin, gross profit, gross loss, operating expenses, operating income, earnings per share, loss per share, net cash balance, capital expenditures, gain on sale of businesses, net, tax expense, after-tax gain on sale of businesses, non-operating income, income (loss) before taxes, net income, net loss, and implied loss per share; volume sold, bookings, booking opportunities, expected module shipments; products and our business and financial objectives for 2023; the availability of benefits under certain production linked incentive programs; the impact of the Inflation Reduction Act of 2022 (the “IRA”) including the total advanced manufacturing production credit available to us under Section 45X of the Internal Revenue Code; the ability of our updated contracting structure to provide ASP upsides and gross margin risk mitigation and a meaningful benefit to our current contracted backlog ASPs; our energy yield; our expectations regarding investment in the expansion of our domestic and international capacity and the dedicated R&D innovation center; our expectations regarding our work with partners; and our belief about recently passed legislation.

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,” “contingent” 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 our forward-looking statements. These factors include, but are not limited to: structural imbalances in global supply and demand for PV solar modules; our competitive position and other key competitive factors; the market for renewable energy, including solar energy and renewable energy projects; the reduction, elimination, expiration or introduction 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; the passage of legislation intended to encourage renewable energy investments through tax credits, such as the IRA, the impact of the IRA on our expected results of operations in future periods, which may be affected by technical guidance, regulations, subsequent amendments or interpretations of the law; interest rate fluctuations and both our and our customers’ ability to secure financing; changes in the exchange rates between the functional currencies of our subsidiaries and other currencies in which assets and liabilities are denominated; our ability to execute on our long-term strategic plans; the loss of any of our large customers, or the ability of our customers and counterparties to perform under their contracts with us; our ability to execute on our solar module technology and cost reduction roadmaps; our ability to improve the wattage of our solar modules; our ability to incorporate technology improvements into our manufacturing process, including the production of bifacial solar modules and next generation Series 7 modules; our ability to avoid manufacturing interruptions, including during the ramp of our Series 7 modules manufacturing facilities; the satisfaction of conditions precedent in our sales agreements; our ability to attract new customers and to develop and maintain existing customer and supplier relationships; 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 arising from and results of pending litigation; future collection and recycling costs for solar modules covered by our module collection and recycling program; supply chain disruptions, including demurrage and detention charges; 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 research and development; the supply and price of components and raw materials, including CdTe; our ability to construct production facilities to support product lines, including Series 6 and Series 7 module manufacturing; our ability to attract and retain key executive officers and associates; the severity and duration of public health threats (including pandemics such as COVID-19), and the potential impact on our business, financial condition, and results of operations; and the matters discussed under the captions “Risk Factors” and “Management’s Discussion and Analysis of Financial Condition 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. You should carefully consider the risks and uncertainties described in these reports.

# Second Quarter 2023 Update



## Demand

- Year to date bookings of 21.1 GW; 8.9 GW since previous earnings call
- Total bookings backlog of 77.8 GW extending through 2030
- Total bookings opportunities of 78.3 GW; 48.5 GW mid-to-late stage



## Series 6 <sup>(1)</sup>

- 2.4 GW produced
- 475 watt top bin, 468 watt average bin
- 98% manufacturing yield



## Series 7 <sup>(1)</sup>

- 425 MW produced in second quarter, 595 MW produced year to date
- Recently demonstrated 13,000 module/day capability and top module wattage of 540
- Completed construction of the India facility and commenced pre-production testing



## Technology

- Limited production run of our first thin film bifacial solar panel
- Acquired Evolar, a European leader in perovskites and CIGS thin film technology

1) Data from April 1, 2023 through June 30, 2023

# Facilities Update

## India

Expected  
2H 2023



## Ohio Expansion and R&D Facility

Expected  
2024



## Alabama

Expected  
2024



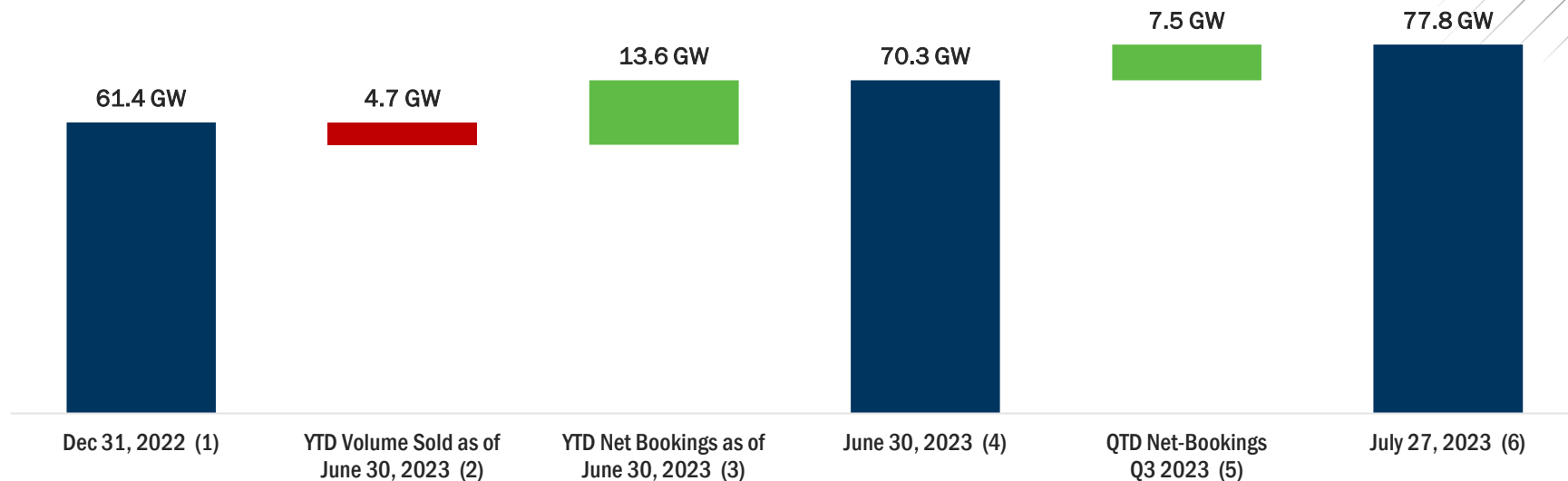
## 5<sup>th</sup> US Facility

Expected  
2026





# Expected Module Volume Sold (GW):



The table above presents our expected module volume sold.

(1) Backlog as of December 31, 2022

(2) Volume sold from January 1, 2023 to June 30, 2023

(3) Net-bookings from January 1, 2023 to June 30, 2023

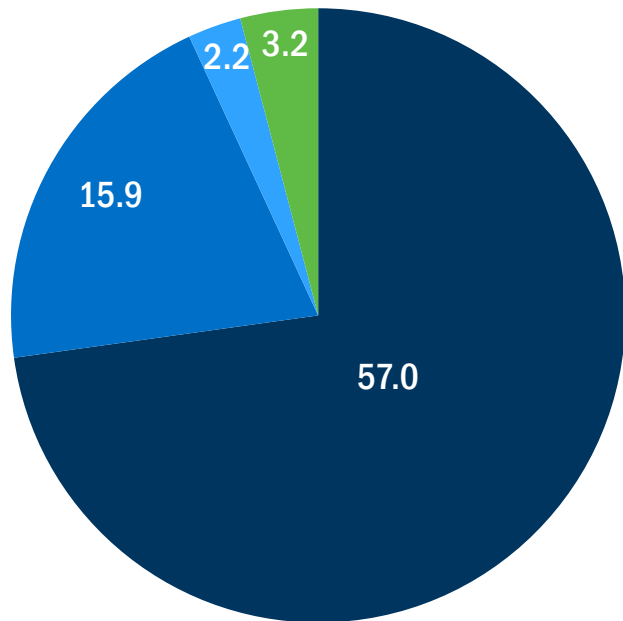
(4) Backlog as of June 30, 2023

(5) Net-bookings from July 1, 2023 to July 27, 2023

(6) Backlog as of June 30, 2023 and net-bookings through July 27, 2023. Volume sold from July 1, 2023 to July 27, 2023 not deducted

# Potential Booking Opportunities

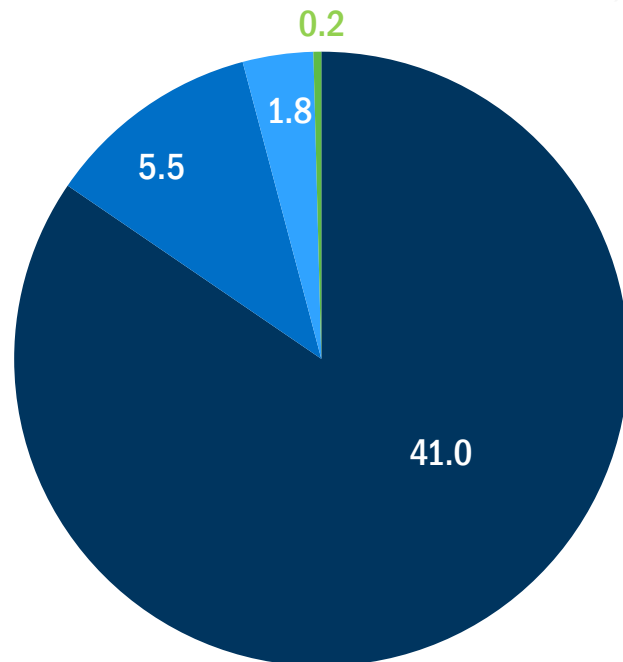
Total bookings opportunities



78.3 GW Opportunity

6.7 GW  
of opportunities  
confirmed,  
but not booked

Mid-to-Late stage opportunities



48.5 GW Opportunity

# 2023 Sustainability Report: 2022 Highlights

**9.1 GW**

Produced



**↓8%**



Lower  
Manufacturing  
Energy Intensity  
vs. 2021

**↓28%**



Lower  
Manufacturing  
Waste Intensity  
vs. 2021



Lower Manufacturing  
Water Intensity  
vs. 2021

**11%**

Lower GHG  
Emissions  
Intensity  
vs. 2021



**+ 4%**

Women in Management  
vs. 2021



**Prime**

ISS ESG Rating



**1st**

EPEAT-Rated  
PV Products



**AA**

MSCI ESG Rating



# Income Statement Highlights

<i>(In millions, except per share amounts)<sup>(1)</sup></i>	Q2 2023A	Q1 2023A	Q2 2022A	QoQ Change	YoY Change
<b>Net sales</b>	<b>\$811</b>	<b>\$548</b>	<b>\$621</b>	<b>\$262</b>	<b>\$190</b>
<i>Gross profit (loss) %</i>	38.3%	20.4%	(3.7%)	17.9%	42.0%
Selling, general and administrative	46	44	39	2	7
Research and development	37	31	25	6	12
Production start-up	23	19	13	4	10
Litigation loss	36	-	-	36	36
Gain on sales of businesses, net <sup>(2)</sup>	-	-	245	-	(245)
<b>Operating income</b>	<b>169</b>	<b>18</b>	<b>145</b>	<b>151</b>	<b>24</b>
Income tax (expense) benefit	(18)	7	(84)	(25)	66
<b>Net income</b>	<b>171</b>	<b>43</b>	<b>56</b>	<b>128</b>	<b>115</b>
<b>Net income per share - diluted</b>	<b>1.59</b>	<b>0.40</b>	<b>0.52</b>	<b>1.19</b>	<b>1.07</b>

(1) Actual, QoQ, and YoY amounts rounded to the nearest million and may not tie due to rounding

(2) Reflects gain associated with the sales of our Japan project development business



# Balance Sheet Highlights

<i>(In millions)</i> <sup>(1)</sup>	Q2 2023A				
	Q2 2023A	Q1 2023A	Q2 2022A	QoQ Change	YoY Change
Cash and marketable securities <sup>(2)</sup>	\$1,899	\$2,287	\$1,853	(389)	46
Accounts receivable <sup>(3)</sup>	668	325	490	344	179
Inventories - current and noncurrent	1,013	1,005	1,049	9	(36)
Property, plant and equipment, net	4,020	3,859	2,989	162	1,031
<b>Total assets</b>	<b>8,997</b>	<b>8,565</b>	<b>7,419</b>	<b>433</b>	<b>1,578</b>
Deferred revenue - current and noncurrent	1,547	1,348	506	199	1,042
Long-term debt - current and noncurrent	437	320	175	117	262
<b>Total liabilities</b>	<b>2,958</b>	<b>2,696</b>	<b>1,524</b>	<b>262</b>	<b>1,434</b>
<b>Total stockholders' equity</b>	<b>6,040</b>	<b>5,869</b>	<b>5,896</b>	<b>171</b>	<b>144</b>

(1) Actual, QoQ, and YoY amounts rounded to the nearest million and may not tie due to rounding

(2) Includes cash and cash equivalents, marketable securities, restricted cash and restricted cash equivalents

(3) Includes accounts receivable trade, net and unbilled

# 2023 Guidance as of July 27, 2023 <sup>(1)</sup>

	Prior	Current
Net Sales	\$3.4B to \$3.6B	Unchanged
Gross Margin (\$) <sup>(2)</sup>	\$1.2B to \$1.3B	Unchanged
Operating Expenses <sup>(3)</sup>	\$415M to \$440M	\$450M to \$475M
Operating Income <sup>(4)</sup>	\$745M to \$870M	Unchanged
Earnings Per Share	\$7.00 to \$8.00	Unchanged
Net Cash Balance <sup>(5)</sup>	\$1.2B to \$1.5B	\$1.5B to \$1.8B
Capital Expenditures	\$1.9B to \$2.1B	\$1.7B to \$1.9B
Volume Sold	11.8GW to 12.3GW	Unchanged



- (1) The guidance figures presented are forward-looking statements that are subject to a variety of assumptions and estimates, including with respect to certain factors related to the Inflation Reduction Act of 2022. Among other things, such factors include (i) the total advanced manufacturing production benefits available to us under Section 45X of the Internal Revenue Code, and (ii) the timing and ability to monetize such benefits
- (2) Includes \$110 to \$130 million of ramp and underutilization costs and \$660 to \$710 million of Section 45X tax benefits
- (3) Includes \$85 to \$90 million of production start-up expenses, and \$36 million of litigation losses
- (4) Includes \$195 to \$220 million of production start-up expenses, ramp and underutilization costs, \$36 million of litigation losses, and \$660 to \$710 million of Section 45X tax benefits
- (5) Defined as cash, cash equivalents, marketable securities, restricted cash, and restricted cash equivalents less expected debt at the end of 2023

# Summary and Highlights



## Demand

- Year to date bookings of 21.1 GW
- Total contracted backlog of 77.8 GW extending through 2030



## Manufacturing & Technology

- Record Q2 production of 2.8 GW, including 425 MW of new Series 7 technology
- India, Ohio expansion, Alabama, and R&D facility construction on schedule
- Bifacial limited production run and Evolar acquisition
- Announced new 3.5 GW Series 7 plant, fifth factory in United States, expected operational 1H 2026



## Financial

- Q2 2023 EPS of \$1.59
- Q2 2023 gross cash<sup>1</sup> of \$1.9 billion, net cash<sup>2</sup> of \$1.5 billion
- Maintain full-year 2023 revenue and EPS guidance

(1) Defined as cash, cash equivalents, marketable securities, restricted cash and restricted cash equivalents

(2) Defined as gross cash less debt



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