



First Solar Q1'23 Earnings Call

April 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; increased research and development (“R&D”) programs and investment; a new Series 7 product; results of our Copper Replacement (“CuRe”) program; 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; 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.

First Quarter 2023 Update



Demand

- Year to date bookings of 12.1 GW; 4.8 GW since previous earnings call
- Total bookings backlog of 71.6 GW extending through 2029
- Total bookings opportunities of 113 GW; 73 GW mid-to-late stage



Series 6 ⁽¹⁾

- 2.36 GW produced
- 475 watt top bin, 467 watt average bin
- 98% manufacturing yield



Series 7

- Produced 170 MW in First Quarter
- Recently demonstrated 10,000 module/day capability and top production bin of 535 watts
- Received IEC and UL certification



Technology

- World record CdTe research cell conversion efficiency of 22.3%
- Award from U.S. Department of Energy related to tandem module development

1) Data from January 1, 2023 through March 31, 2023

Facilities Update

India

Expected
2H 2023



Ohio Expansion

Expected
2024



Alabama

Expected
2024 / 2025

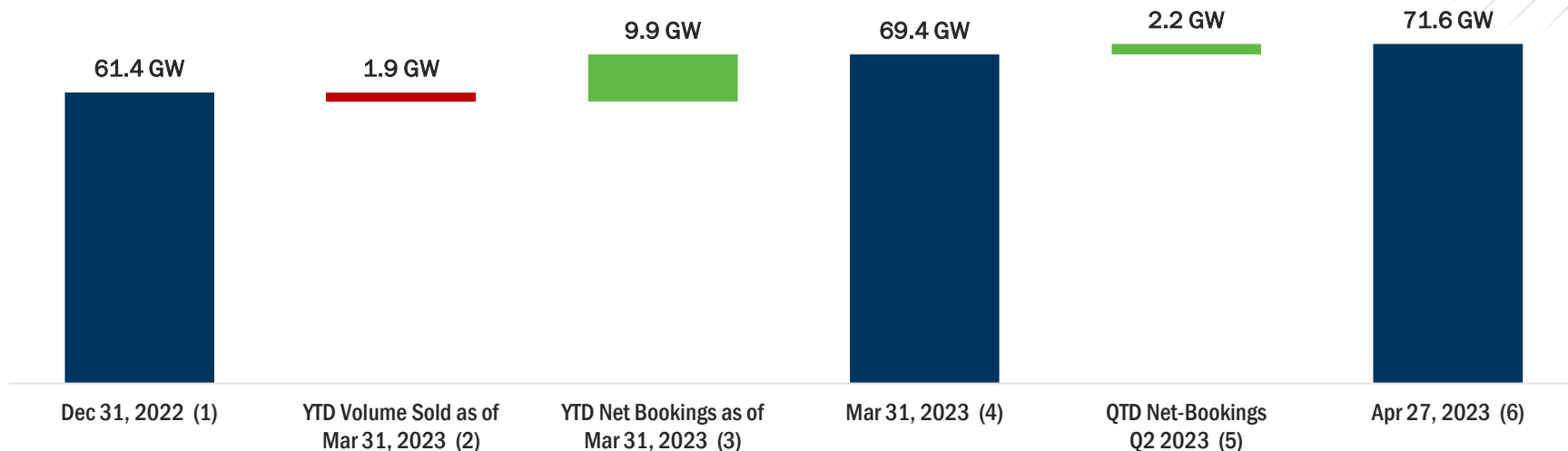


R&D Facility

Expected
2024



Expected Module Volume Sold (GW_{DC}):



The table above presents our expected module volume sold. In prior quarters we have presented figures related to expected module shipments.

(1) Backlog as of December 31, 2022

(2) Volume sold from January 1, 2023 to March 31, 2023

(3) Net-bookings from January 1, 2023 to March 31, 2023

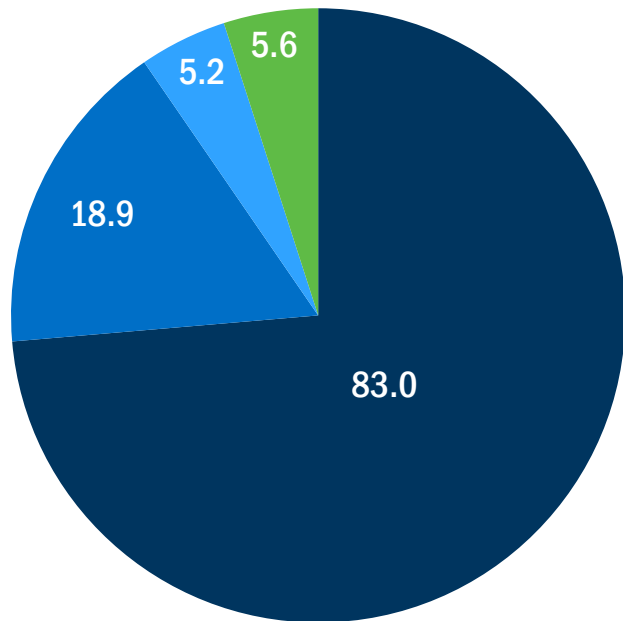
(4) Backlog as of March 31, 2023

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

(6) Backlog as of March 31, 2023 and net-bookings through April 27, 2023. Volume sold from April 1, 2023 to April 27, 2023 not deducted

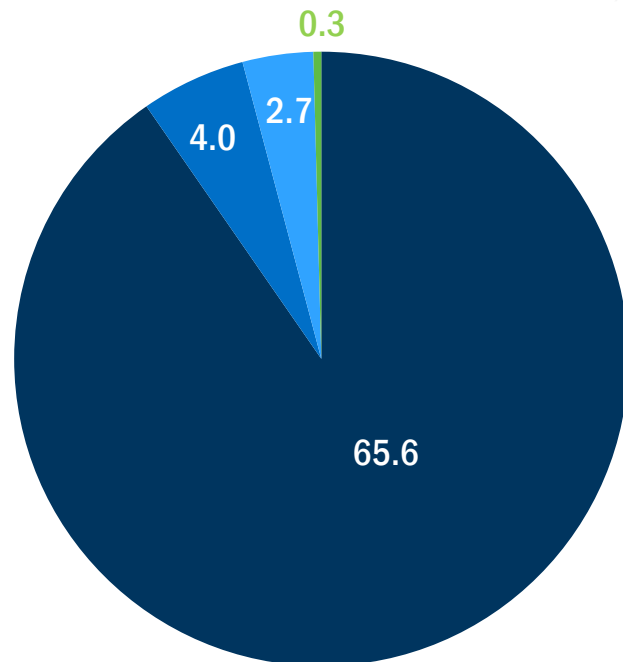
Potential Booking Opportunities

Total bookings opportunities



112.7 GW_{DC} Opportunity

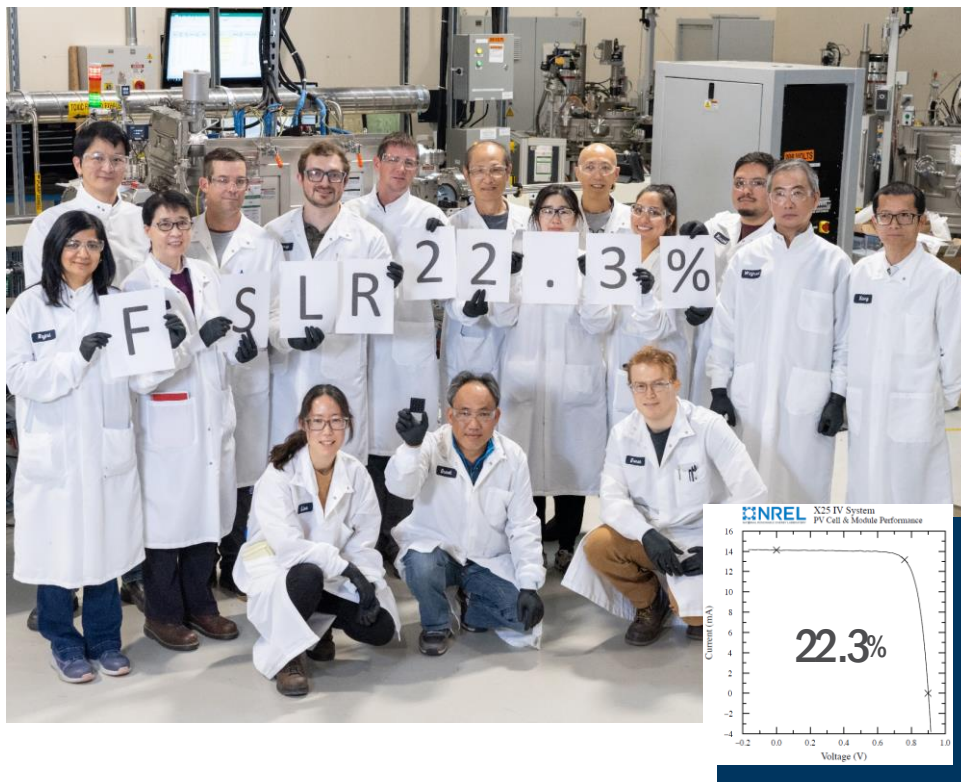
Mid-to-Late stage opportunities



72.6 GW_{DC} Opportunity

4.7 GW_{DC}
of opportunities
confirmed,
but not booked

World Record CadTel Research Cell with CuRe Technology



Improvements	Record Cell Attributes ¹
✓	CuRe Technology
✓	Efficiency
✓	Temperature Coefficient
✓	Year 1 Degradation
✓	Long Term Degradation
Estimated up to 6% lifetime energy ² improvement over previous record	

- 1) Record cell is mono-facial; CuRe technology enables an approximate 10% increase in bi-faciality for an incremental up to 1% of lifetime energy
- 2) Assumes 30 year life with a CuRe 0.1%/year long term degradation rate

Income Statement Highlights

<i>(In millions, except per share amounts)⁽¹⁾</i>	Q1 2023A	Q4 2022A	Q1 2022A	QoQ Change	YoY Change
Net sales	\$548	\$1,002	\$367	(\$454)	\$181
<i>Gross profit %</i>	<i>20.4%</i>	<i>6.0%</i>	<i>3.1%</i>	<i>14.4%</i>	<i>17.3%</i>
Selling, general and administrative	44	43	37	1	7
Research and development	31	31	27	(1)	3
Production start-up	19	33	7	(13)	12
Gain on sales of businesses, net	-	-	2	-	(2)
Operating income (loss)	18	(46)	(58)	64	76
Income tax benefit (expense)	7	(1)	19	8	(13)
Net income (loss)	43	(8)	(43)	50	86
Net income (loss) per share - diluted	0.40	(0.07)	(0.41)	0.47	0.81

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

Balance Sheet Highlights

<i>(In millions)</i> ⁽¹⁾	Q1 2023A	Q4 2022A	Q1 2022A	QoQ Change	YoY Change
Cash and marketable securities ⁽²⁾	\$2,287	\$2,590	\$1,558	(303)	729
Accounts receivable ⁽³⁾	325	355	322	(30)	3
Inventories - current and noncurrent	1,005	882	1,079	123	(74)
Property, plant and equipment, net	3,859	3,537	2,786	322	1,073
Total assets	8,565	8,251	7,399	314	1,166
Deferred revenue - current and noncurrent	1,348	1,208	374	140	974
Long-term debt - current and noncurrent	320	184	252	136	68
Total liabilities	2,696	2,415	1,524	281	1,172
Total stockholders' equity	5,869	5,836	5,875	33	(6)

(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 trade and unbilled accounts receivable

2023 Guidance as of April 27, 2023 ⁽¹⁾

	Prior	Current
Net Sales	\$3.4B to \$3.6B	Unchanged
Gross Margin (\$) ⁽²⁾	\$1.2B to \$1.3B	Unchanged
Operating Expenses ⁽³⁾	\$415M to \$440M	Unchanged
Operating Income ⁽⁴⁾	\$745M to \$870M	Unchanged
Earnings Per Share	\$7.00 to \$8.00	Unchanged
Net Cash Balance ⁽⁵⁾	\$1.2B to \$1.5B	Unchanged
Capital Expenditures	\$1.9B to \$2.1B	Unchanged
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
- (4) Includes \$195 to \$220 million of production start-up expenses, ramp and underutilization costs 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 12.1 GW
- Total contracted backlog of 71.6 GW extending through 2029



Manufacturing & Technology

- Record Q1 production of 2.5 GW, including 170 MW of new Series 7 technology
- India, Ohio expansion, Alabama, and R&D facility construction on schedule
- World record CdTe research cell conversion efficiency of 22.3%



Financial

- Q1 2023 EPS of \$0.40
- Q1 2023 Gross cash¹ of \$2.3 billion, net cash² of \$2.0 billion
- Reiterate full-year 2023 guidance

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

(2) Defined as gross cash less debt



LEADING THE WORLD'S
SUSTAINABLE ENERGY FUTURE