



First Solar Q4'21 Earnings and 2022 Guidance Call

March 1, 2022



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Important Information

Cautionary Note Regarding Forward Looking Statements

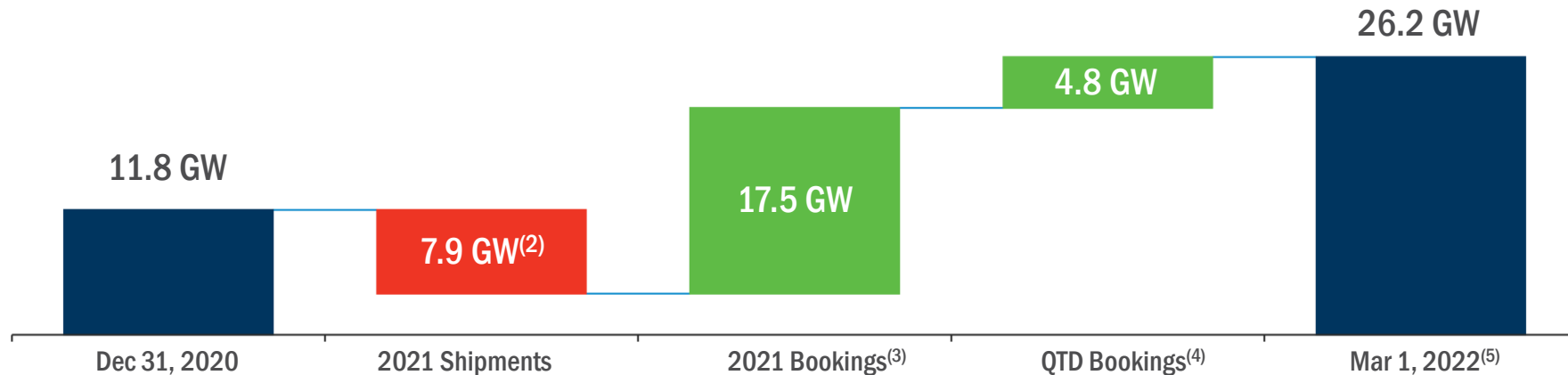
This presentation contains forward-looking statements which are made pursuant to safe harbor provisions of the Private Securities Litigation Reform Act of 1995. All statements in this presentation, other than statements of historical fact, are forward-looking statements. These forward-looking statements 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 financial guidance for 2022, including future financial results, operating results, net sales, gross margin, operating expenses, operating income, earnings per share, net cash balance, capital expenditures, revenues, cost of goods sold, and gross margin percentage; bookings, booking opportunities, products, product improvements, efficiency, projected costs (including estimated future module collection and recycling costs), module shipments, production plans, warranties, backlog, confirmations, sales, supply, production, nameplate manufacturing capacity, solar module technology and cost reduction roadmaps, effects of delays in implementation of our CuRe program and related estimated impacts, product reliability, photovoltaic (“PV”) market growth and competitiveness, and capital expenditures; our ability to continue to reduce the cost per watt of our solar modules (and the impact of drivers to reduce such costs); our ability to upgrade and expand manufacturing capacity worldwide; the commenced construction of our new manufacturing plant in Ohio and our new manufacturing plant in India (Tamil Nadu); our ability to continue expanding our manufacturing footprint; our ability to reduce the costs to construct PV solar power systems; research and development (“R&D”) programs; the impact of our copper replacement (CuRe) program; and energy yield.

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; 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; interest rate fluctuations and both our and our customers’ ability to secure financing; 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; the creditworthiness of our offtake counterparties and the ability of our offtake counterparties to fulfill their contractual obligations to us; 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; 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; future collection and recycling costs for solar modules covered by our module collection and recycling program; supply chain disruption, including the availability of shipping containers, port congestion, canceled shipments by logistic providers, and the cost of fuel, all of which may be exacerbated by the COVID-19 pandemic; 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 convert existing or construct production facilities to support new product lines; our ability to attract and retain key executive officers and associates; the severity and duration of the COVID-19 pandemic, including its 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 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. You should carefully consider the risks and uncertainties described in these reports.

2021 Review

- **Commercial**
 - 17.5 GW of net-bookings in 2021, more than double prior annual record
 - 4.8 GW of net-bookings 2022 year-to-date; 11.8 GW since previous earnings call
- **Manufacturing**
 - Produced 7.9 GW in 2021
 - Reduced cost per watt produced by 6% between the end of 2020 and end of 2021
 - In early 2021 added our sixth Series 6 factory, our second in Malaysia
 - Exited 2021 with a top production bin of 465 watts
 - Announced plan to produce next-generation Series 7 module in India and Ohio
- **Technology**
 - Increased top Series 6 production bin to 465 watts, which represents a 20 watt increase year-over-year
 - Reduced 30-year warranted power output degradation rate from 0.5% to 0.3% per year
- **Strategic**
 - Completed the sales of U.S. Project Development and North American O&M businesses

Expected Module Shipments⁽¹⁾ (GW_{DC}):



The above table presents the actual module shipments for 2021 through Dec 31, 2021, new module volume net-bookings through Mar 1, 2022, and the expected module shipments beyond Dec 31, 2021. A module is considered to be shipped when the delivery process to a customer commences and the module leaves one of our facilities or the module has been recognized as revenue. 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) 7.9 GW of net shipments deducted from backlog; 0.2 GW of modules previously shipped to safe harbor the U.S. investment tax credit for future systems projects.
- (3) Reflects bookings from Jan 1, 2021 to Dec 31, 2021, reduced by 0.6 GW of debookings.
- (4) Reflects bookings from Jan 1, 2022 to Mar 1, 2022.
- (5) Balance includes remaining shipment volumes as of Dec 31, 2021 and bookings through Mar 1, 2022. Shipments from Jan 1 to Mar 1, 2022 not deducted.

Income Statement Highlights

<i>(In millions, except per share amounts)⁽¹⁾</i>	Q4 2021A			2021A	
	Q4 2021A	QoQ Change	YoY Change	2021A	YoY Change
Net sales	\$907	\$324	\$298	\$2,923	\$212
<i>Gross profit %</i>	<i>27.2%</i>	<i>5.8%</i>	<i>0.9%</i>	<i>25.0%</i>	<i>(0.1%)</i>
Selling, general and administrative	38	(5)	(24)	170	(53)
Research and development	30	4	7	99	5
Production start-up	5	2	(12)	21	(19)
Gain on sales of businesses, net ⁽²⁾	-	2	-	147	147
Operating income	173	122	115	587	269
Income tax (expense) benefit	(36)	(35)	(102)	(103)	(211)
Net income	131	86	16	469	70
Net income per share - diluted	1.23	0.81	0.15	4.38	0.65

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

(2) Realized gain on the sales of North American O&M and U.S. project development businesses in Q1'21; certain purchase price adjustments recorded in Q3'21

Balance Sheet Highlights

<i>(In millions)</i> ⁽¹⁾	Q4 2021A				
	Q4 2021A	Q3 2021A	Q4 2020A	QoQ Change	YoY Change
Cash and marketable securities ⁽²⁾	\$1,831	\$1,940	\$1,794	(109)	38
Accounts receivable ⁽³⁾	455	273	292	181	162
Inventories - current and noncurrent	904	884	769	20	135
Property, plant and equipment, net	2,650	2,506	2,402	144	247
PV solar power systems, net	217	230	243	(13)	(26)
Project assets - current and noncurrent	315	335	373	(20)	(58)
Total assets	7,414	7,269	7,109	145	305
Long-term debt - current and noncurrent	240	279	279	(39)	(39)
Total liabilities	1,454	1,439	1,588	16	(134)
Total stockholders' equity	5,960	5,830	5,521	129	439

(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, and restricted cash

(3) Includes accounts receivable trade, net & accounts receivable, unbilled and retainage, net

Series 6 Technology Roadmap

	Series 6 2020 Actual	CuRe 2021 Target	Series 6 2021 Actual	Series 6 2022 Target	Mid-Term Target (Bifacial)	Mid-Term Target (Monofacial)
Exit Rate Top Production Bin (Watts)	445	460-465	465	470-475	490	500
Warranted Degradation (% per year)	0.5%	0.2%	0.3%	0.3%	0.2-0.3%	0.2-0.3%
Temperature Coefficient (-%/°C)	0.32%	0.28%	0.32%	0.28-0.32%	0.28-0.32%	0.28-0.32%
Bifaciality	N/A	N/A	N/A	N/A	Yes	No

Expansion Update

New Manufacturing Plant in Ohio

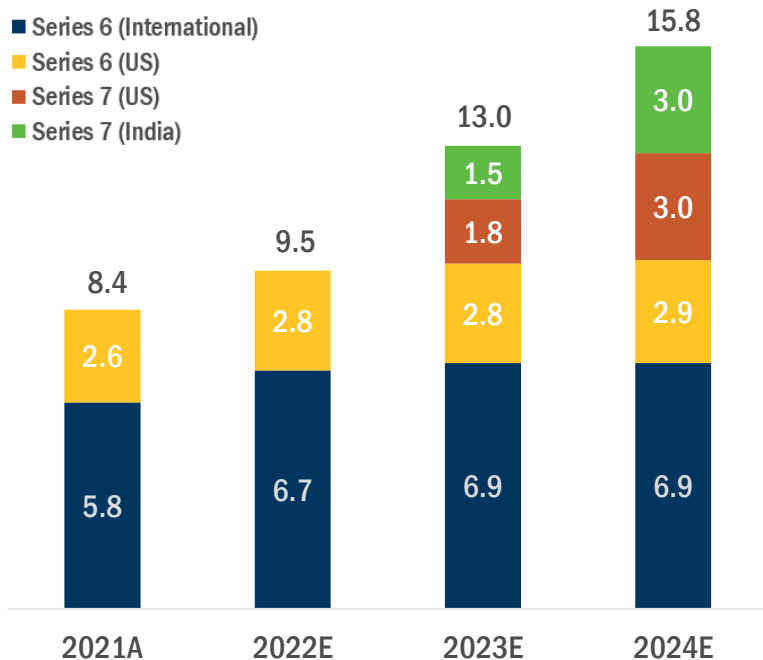


New Manufacturing Plant in India

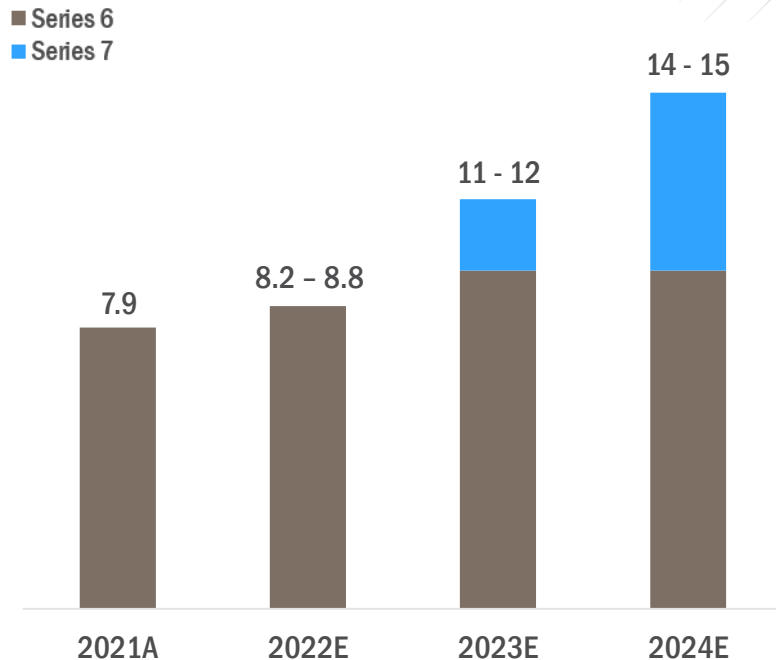


Expansion Update (Cont'd)

Year-End Nameplate Manufacturing Capacity (GW)



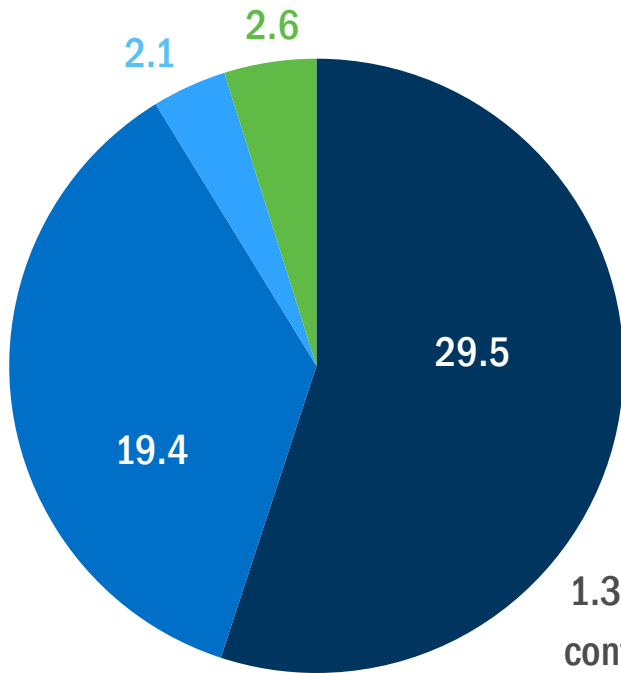
Full-Year Production (GW)



New factories in Ohio and India continue manufacturing footprint expansion

Potential Booking Opportunities

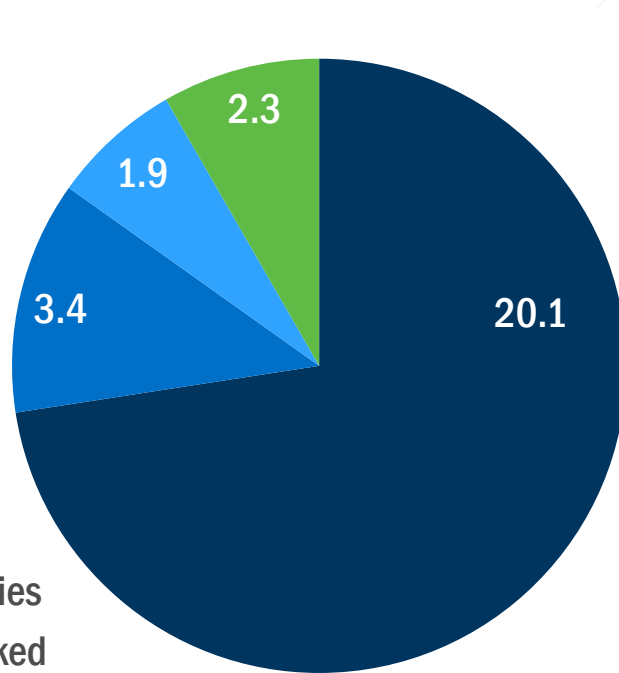
Total bookings opportunities



53.6 GW_{DC} Opportunity

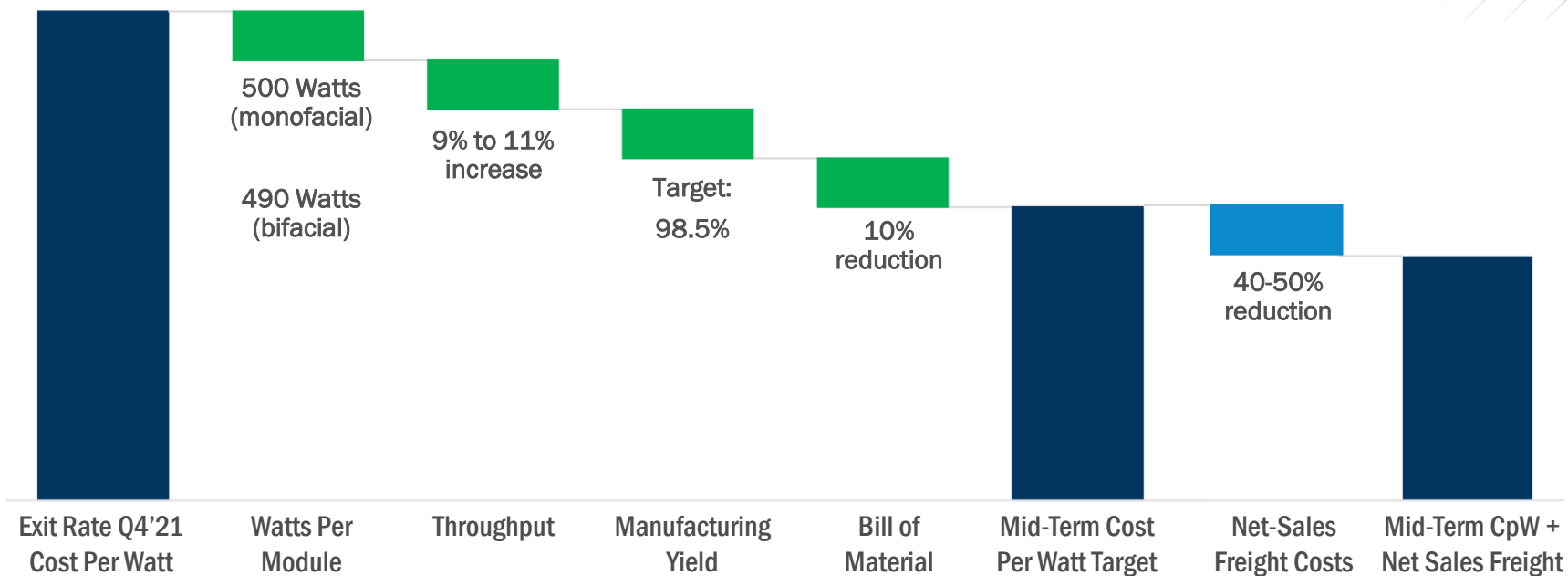
1.3 GW_{DC} of opportunities confirmed, but not booked

Mid-to-Late stage opportunities



27.7 GW_{DC} Opportunity

Series 6 Cost Per Watt Drivers



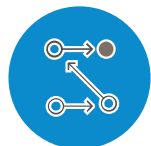
Series 7 expected to reduce cost-per-watt and sales freight costs by approximately 1 to 2 cents relative to Series 6

2022 Guidance Assumptions



Cost Roadmap

- Glass expenses largely stabilized through predominantly fixed-price agreements
- Anticipate framing (aluminum) costs will be elevated relative to historical norms
- Sales freight expected to be approximately 5 cents per watt in 2022
- Expect cost per watt produced reduction despite inflationary pressure



Legacy Systems

- In advanced stage discussions to sell Japan project development and O&M platform⁽¹⁾
 - Guidance assumes an estimated \$270 million to \$290 million gain on sale
- Signed agreement to sell remaining international O&M contracts
 - Expected to close 1H'22 at an estimated \$10 million gain on sale



Operational

- 2022 production plan of 8.2 GW to 8.8 GW
- 2022 shipments of 8.9 GW and 9.4 GW



Upgrades and Expansion

- Upgrades to existing fleet and expansion activities planned for 2022
- Forecasting \$10 million to \$15 million of underutilization losses (cost of sales) in 2022
- Anticipate production start-up expense of \$85 million to \$90 million (opex) in 2022
- Total start-up and underutilization of \$95 million to \$105 million in 2022

⁽¹⁾ The consideration of a potential sale for its Japan project development and O&M platform by First Solar is at a preliminary stage and may not result in any transaction being consummated. First Solar does not intend to disclose further developments with respect to this process except to the extent the process is concluded or it is required by law or otherwise deemed appropriate.

2022 Guidance as of March 1, 2022

2022 Guidance

Net Sales	\$2.4B to \$2.6B
Gross Margin (\$) ⁽¹⁾	\$155M to \$215M
Operating Expenses ⁽²⁾	\$365M to \$380M
Operating Income ^(3,4)	\$55M to \$150M
Earnings Per Diluted Share	\$0.00 to \$0.60
Net Cash Balance ⁽⁵⁾	\$1.1B to \$1.35B
Capital Expenditures	\$850M to \$1.1B
Shipments	8.9GW to 9.4GW



Photo © Swinerton Renewable Energy

- (1) Includes \$10 million to \$15 million of underutilization losses
- (2) Includes \$85 million to \$90 million of production start-up expense
- (3) Includes \$95 million to \$105 million of production start-up expense and underutilization losses
- (4) Includes \$270 million to \$290 million pre-tax gain related to the potential sale of the Japan project development and O&M platform sale
- (5) Defined as cash, cash equivalents, marketable securities, and restricted cash less expected debt at the end of 2022

Summary & Highlights



Financial

- 2021 earnings per diluted share of \$4.38
- Achieved 6% cost per watt reduction between the end of 2020 and 2021
- 2021 year end net cash⁽¹⁾ of \$1.6 billion
- 2022 earnings per diluted share guidance of \$0.00 to \$0.60



Series 6 Manufacturing

- Continue to expand manufacturing capacity and expect to exit 2024 with approximately 16 GW of nameplate capacity
- 8.2 GW to 8.8 GW of Series 6 production forecasted in 2022



Bookings

- 11.8 GW of net bookings since the previous earnings call
- Current contracted backlog of 26.2 GW
- Opportunity pipeline of 53.6 GW, including 27.7 GW mid-to-late stage

(1) Defined as cash, cash equivalents, marketable securities, and restricted cash less debt at the end of 2021



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