First Solar Q4’20 Earnings and 2021 Guidance Call

February 25, 2021

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: 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 the full-year 2021, future financial results, operating results, net sales, revenues, cost of goods sold, gross margin, gross margin percentage, operating expenses, operating income, earnings per share, net cash balance, capital expenditures, products, product improvements, efficiency, projected costs (including estimated future module collection and recycling costs), warranties, the timing of closing our U.S. project development business sale and our North American O&M sale, shipments, bookings, booking opportunities, backlog, confirmations, sales, supply, production, nameplate manufacturing capacity, solar module technology and cost reduction roadmaps, restructuring, product reliability, photovoltaic ("PV") market growth and competitiveness, investments in unconsolidated affiliates, 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 expand manufacturing capacity worldwide; 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; 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: the severity and duration of the COVID-19 pandemic, including its potential impact on the Company's business, results of operations and financial condition; 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 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 litigation; 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 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.

2020 Review

- **Manufacturing**
  - Produced 6.1 GW, including 5.9 GW of Series 6
  - Exited 2020 with a top production bin of 445 watts
- **Financial**
  - Achieved a 10% cost-per-watt reduction between the end of 2019 and 2020
- **Technology**
  - Demonstrated a 25 year degradation rate, from early generation First Solar CadTel modules that were installed at an NREL test facility in 1995, of 48 basis points per year
  - Extended our limited power output warranty from 25 to 30 years. Added the industry's first and only product warranty that protects Series 6 modules from power loss due to cell cracking
- **Commercial**
  - Booked and shipped 5.5 GW in 2020
  - Contracted 0.7 GW in 2020, subject to conditions precedent

Module Segment Update

2020 vs. 2019 Manufacturing Performance

- 6.1 GW of production, an increase of 0.4 GW
- 5.9 GW of Series 6 production, an increase of 2.2 GW
- December 2020 (vs. December 2019):
  - MWs produced per day of 17.3 MW (increase of 23%)
  - Fleet-wide capacity utilization of 117% (increase of 20 percentage points)
  - Production yield of 97.6% (increase of 3.2 percentage points)
  - Average watts per module of 439 watts (increase of 9 watts)
  - Top production bin of 445 watts (increase of 5 watts)

Year-to-date 2021 Manufacturing Performance

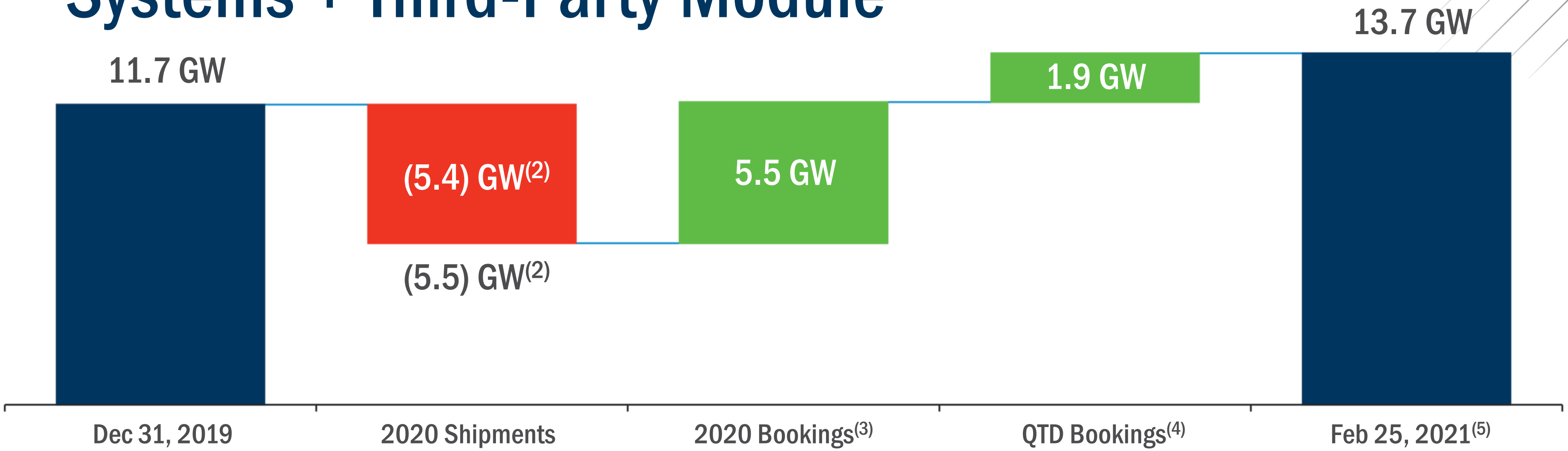
- MWs produced per day 17.8[(1)] / 19.8[(2)]
- Production yield 97.5%[(1)] / 96.6%[(2)]
- Average watts per module 440[(1)] / 440[(2)]
- ARC bin distribution from 435 to 450 of 98%[(1)] / 99%[(2)]
- Fleet-wide capacity utilization 98%[(1,3)] / 90%[(2,3)]
- Top production bin in February increased to 450 watts

Supply Chain and Logistics

- Vertically integrated CdTe manufacturing process has helped mitigate potential operational disruptions
- Utilizing contracted routes and a distribution center, and minimizing changes, have mitigated some of the cost impacts related to capacity constraints in the global shipping market, although conditions remain challenging

(1) Data from January 1, 2021 through January 31, 2021
(2) Data from February 1, 2021 through February 23, 2021
(3) Reflects throughput entitlement reflects exit rate 2020 throughput

Expected Module Shipments[1] (GW_{DC}): Systems + Third-Party Module



The above table presents the actual module shipments for 2020 through Dec 31, 2020, new module volume bookings through Feb 25, 2021, and the expected module shipments beyond Dec 31, 2020. 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) 5.4 GW of net shipments deducted from backlog; 0.1 GW of 5.5 GW total shipments shipped to safe harbor the U.S. investment tax credit for future systems projects.

(3) Reflects bookings from Jan 1, 2020 to Dec 31, 2020.

(4) Reflects bookings from Jan 1, 2021 to Feb 25, 2021, reduced by 0.1 GW of debookings.

(5) Balance includes remaining shipment volumes as of Dec 31, 2020 and bookings through Feb 25, 2021. Shipments from Jan 1 to Feb 25, 2021 not deducted.

Creating More Value with Less Environmental Impact

2.5x
LOWER

Up to 2.5x lower carbon footprint than c-Si PV

90%+

90%+ module recycling material recovery rate

2x
FASTER

Up to 2x faster energy payback time than c-Si PV

Vertically Integrated Manufacturing

Enhances end-to-end supply chain transparency

3x
LOWER

Up to 3x lower water footprint than c-Si PV

First Solar's sustainability advantage supports a circular economy

Income Statement Highlights

(In millions, except per share amounts)[1]	Q4 2020A	Q4 2020A QoQ Change	Q4 2020A YoY Change	2020A	2020A YoY Change
Net sales	**$609**	**($318)**	**($790)**	**$2,711**	**($352)**
Gross profit %	*26.2%*	*(5.4%)*	*2.4%*	*25.1%*	*7.2%*
Selling, general and administrative	63	13	7	223	17
Research and development	23	(0)	(3)	94	(3)
Production start-up	17	4	9	41	(5)
Litigation loss	-	-	(363)	6	(357)
Operating income (loss)	**58**	**(149)**	**176**	**317**	**479**
Income tax benefit (expense)	66	105	36	107	102
Net income (loss)	**116**	**(39)**	**175**	**398**	**513**
Net income (loss) per share - diluted	**1.08**	**(0.37)**	**1.64**	**3.73**	**4.82**

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

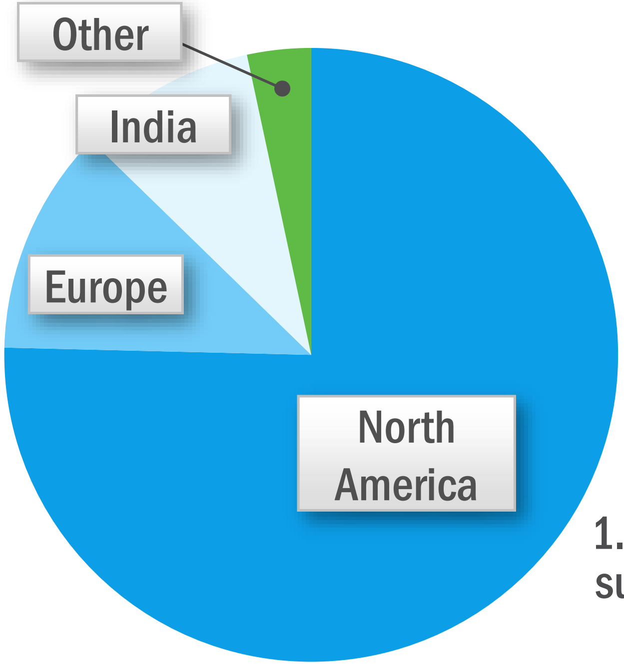
Balance Sheet Highlights

(In millions)[1]	Q4 2020A	Q3 2020A	Q4 2019A	Q4 2020A QoQ Change	Q4 2020A YoY Change
Cash and marketable securities[2]	$1,794	$1,671	$2,258	123	(464)
Accounts receivable[3]	292	307	659	(15)	(366)
Inventories (current and noncurrent)	769	765	604	4	165
Balance of systems parts	-	34	54	(34)	(54)
Property, plant and equipment, net	2,402	2,387	2,181	16	221
PV solar power systems, net	243	257	477	(14)	(234)
Project assets - current and noncurrent	373	364	337	9	36
Assets held for sale[4]	156	35	-	121	156
Total assets	**7,109**	**6,985**	**7,516**	**124**	**(407)**
Long-term debt - current and noncurrent	279	261	472	18	(192)
Liabilities held for sale[4]	26	13	-	13	26
Total liabilities	**1,588**	**1,589**	**2,419**	**(1)**	**(831)**
Total stockholders' equity	**5,521**	**5,396**	**5,097**	**125**	**424**

(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
(4) Assets and liabilities related to the agreements to sell our North American O&M and U.S. project development businesses

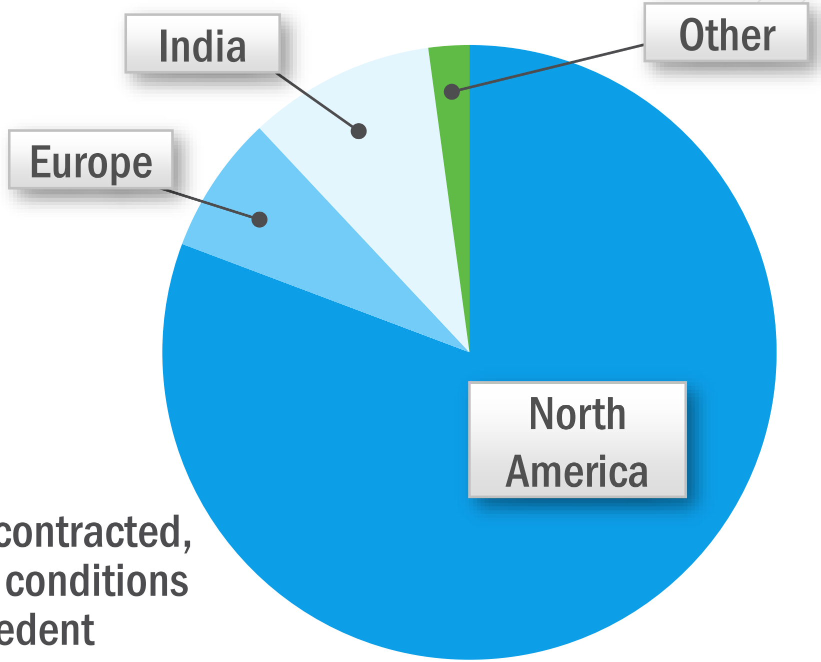
Potential Booking Opportunities: By Geography

Total bookings opportunities	Mid-to-Late stage opportunities



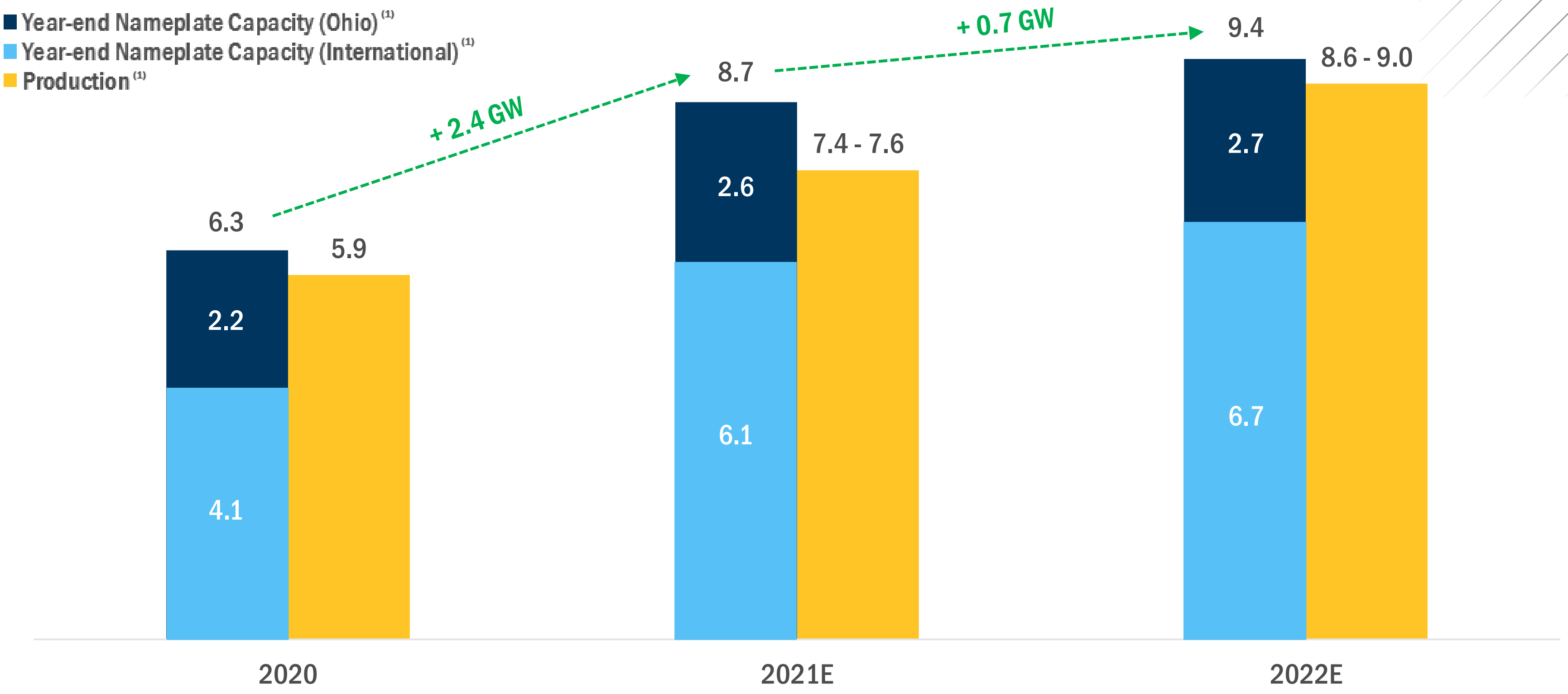
19.7 GW_{DC} Opportunity

1.4 GW_{DC} contracted, subject to conditions precedent



12.6 GW_{DC} Opportunity

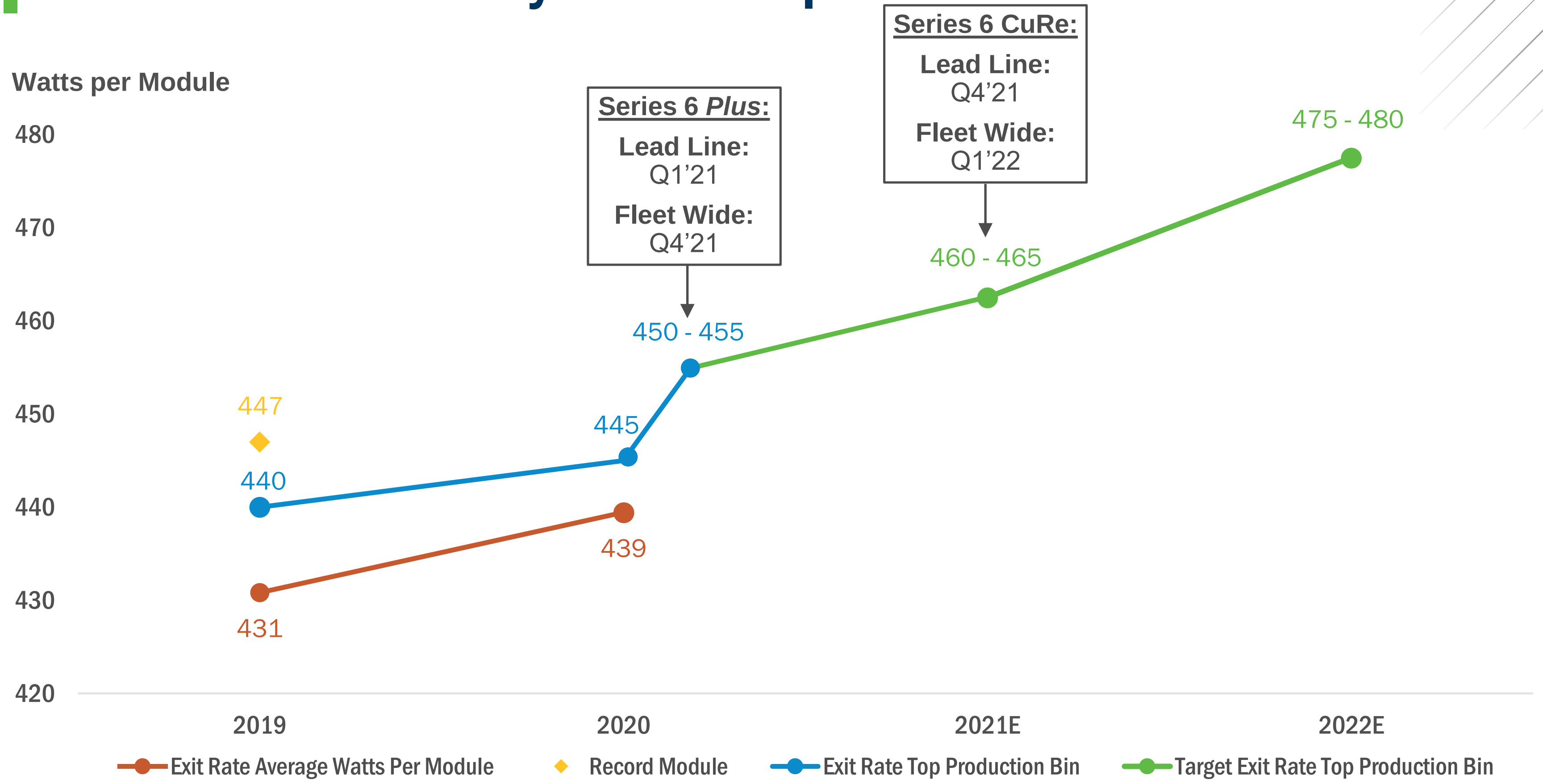
Expanding Manufacturing Footprint (GW)



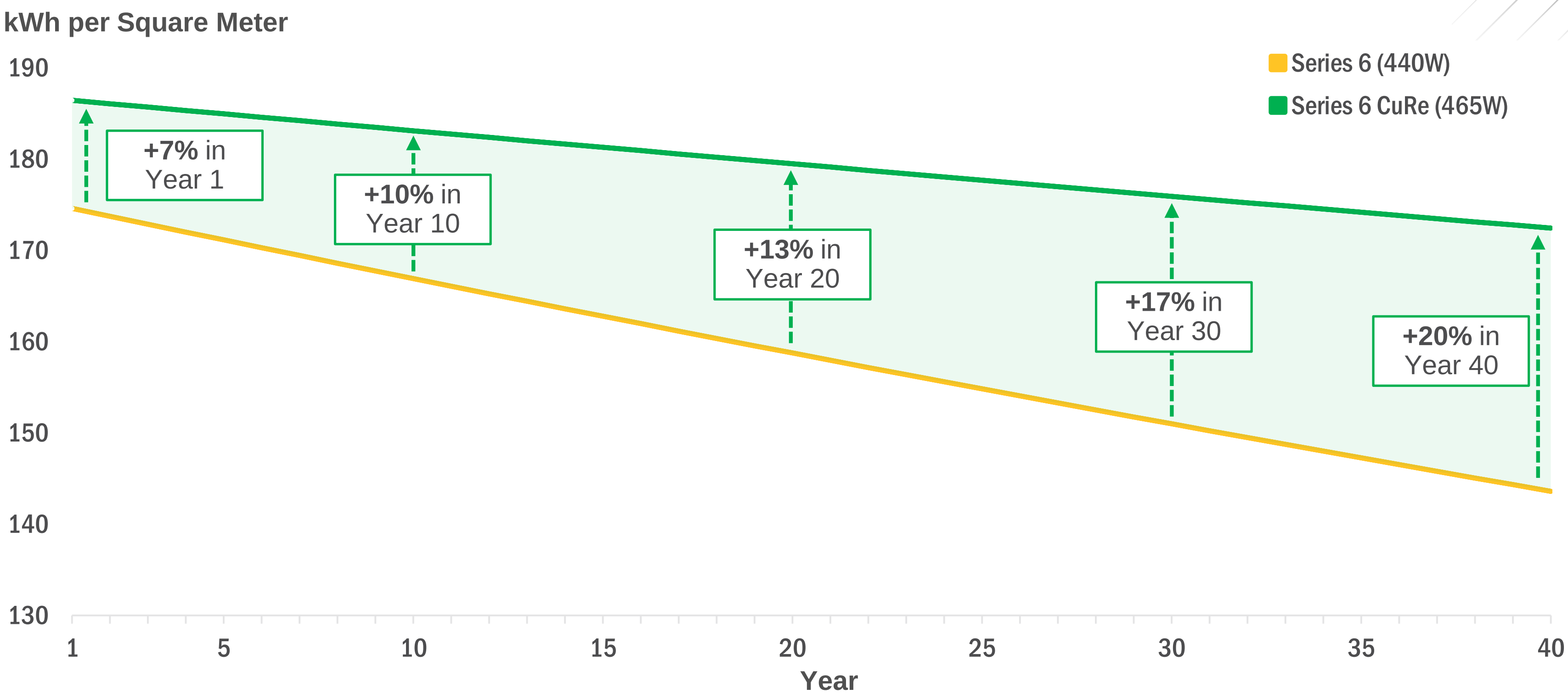
New Malaysia factory and optimization of existing fleet expected to increase capacity

(1) GW per year

Series 6 Efficiency Roadmap

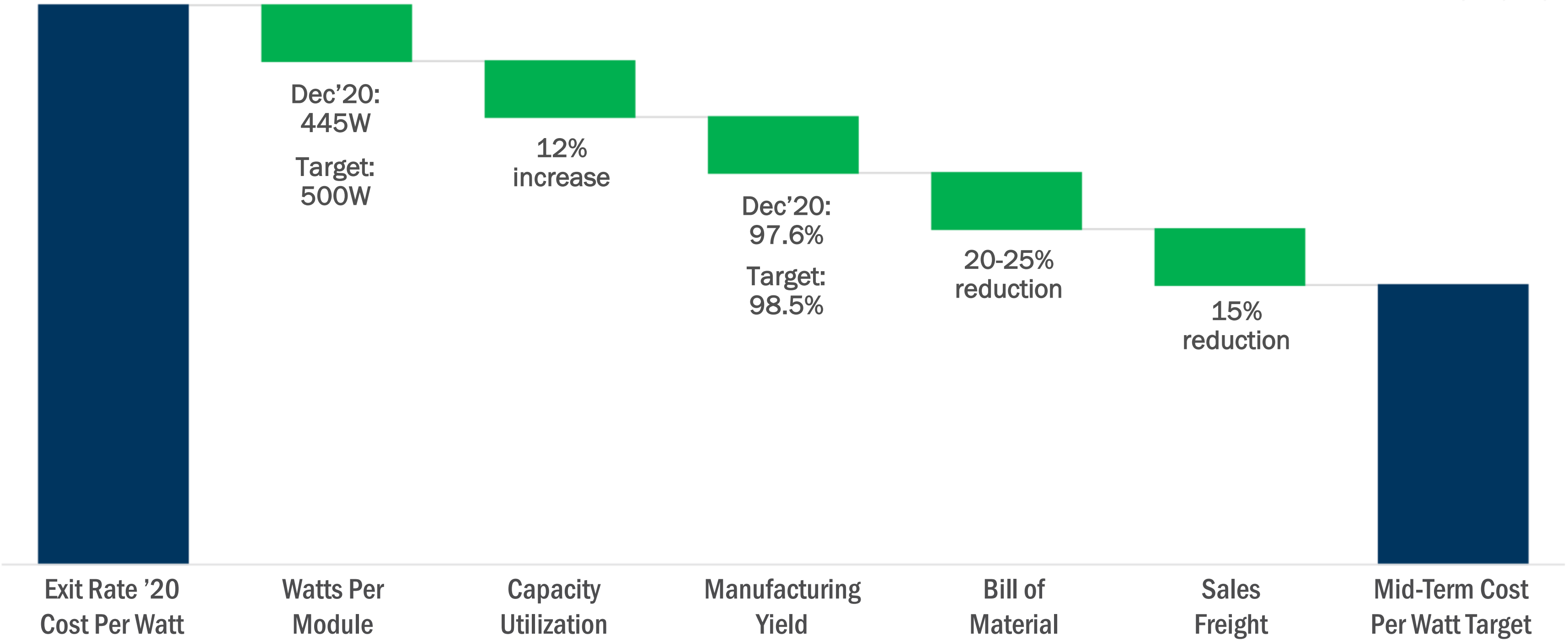


Series 6 (440W) vs. Series 6 CuRe (465W) Expected Energy Density Improvement[1]



(1) Reflects expected energy density improvement of our next generation Series 6 CuRe modules, over a 40-year project life. Assumes degradation rate for 40 years and assumes the environmental conditions of West Texas

Indicative Drivers of Cost Per Watt Reduction



Note: Not to scale

2021 Guidance Assumptions

Strategic

- U.S. project development and North American O&M business sale expected to close in the first half of the year
  - U.S. project development: ~$25 million pre-tax gain
  - North American O&M: ~$115 million pre-tax gain
  - Anticipate run rate annual savings of $65 million to $70 million related to these sales

Operational

- 2021 shipments of 7.8 GW and 8.0 GW
- 2021 production plan of 7.4 GW to 7.6 GW

Series 6 Upgrades

- Second Series 6 factory in Malaysia expected to exit ramp period in Q1
- Full year ramp expense of $5 million to $10 million (**cost of sales**) in 2021
- Fleet-wide upgrades are planned in 2021 to incorporate Series 6 plus, CuRe, and throughput improvements. Forecasting $40 million of underutilization losses (**cost of sales**) in 2021
- Anticipate production start-up expense of $15 million to $20 million (**opex**) in 2021
- Total ramp, start-up, and underutilization of $60 million to $70 million in 2021

COVID-19

- To date have managed the impacts of the COVID-19 pandemic, which has not had significant effects on our operations
- Guidance assumes continued mitigation of any such impacts of COVID-19 on supply chain and operations without the incurrence of material costs

2021 Guidance as of February 25, 2021

	2021 Guidance
Net Sales	$2.85B to $3.0B
Gross Margin ($)(1)	$710M to $775M
Operating Expenses(2)	$285M to $300M
Operating Income(3,4)	$545M to $640M
Earnings Per Share	$4.05 to $4.75
Net Cash Balance(5)	$1.8B to $1.9B
Capital Expenditures	$425M to $475M
Shipments	7.8GW to 8.0GW


Photo © Swinerton Renewable Energy

(1) Includes $5 million to $10 million of ramp expense and $40 million of underutilization losses
(2) Includes $15 million to $20 million of production start-up expense
(3) Includes $60 million to $70 million of ramp expense, production start-up expense, and underutilization losses
(4) Includes an approximately $140 million pre-tax gain related to the sales of the North American O&M and U.S. project development businesses
(5) Defined as cash, cash equivalents, marketable securities, and restricted cash less expected debt at the end of 2021

Summary & Highlights

Financial

- 2020 EPS of $3.73
- Achieved 10% cost per watt reduction between the end of 2019 and 2020
- 2020 year end net cash[(1)] of $1.5 billion
- 2021 EPS guidance of $4.05 to $4.75

Series 6 Manufacturing

- Nameplate manufacturing capacity expected to grow from 6.3 GW at the end of 2020 to 9.4 GW at the end of 2022
- 7.4 GW to 7.6 GW of Series 6 production forecasted in 2021

Bookings

- 3.3 GW of net bookings since the previous earnings call
- Current contracted backlog of 13.7 GW
- Opportunity pipeline of 19.7 GW, including 12.6 GW mid-to-late stage

(1) Defined as cash, cash equivalents, marketable securities, and restricted cash less debt at the end of 2020

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