



First Solar Q3'20 Earnings Call

October 27, 2020



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 the fourth quarter 2020 and implied full-year 2020 guidance, 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, 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 pending 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.

Module Segment Update

Fleet-wide Performance Metrics

- 4.9 GW of year-to-date production⁽¹⁾, including 4.7 GW of Series 6
- Each factory averaged over 100% capacity utilization during the third quarter
- Commenced commercial production of 445 watt modules
- 16.9⁽²⁾ / 17.7⁽³⁾ MWs produced per day and 96.6%⁽²⁾ / 97.2%⁽³⁾ manufacturing yield
- 436⁽²⁾ / 438⁽³⁾ average watts per module and 92%⁽²⁾ and 96%⁽³⁾ ARC bin distribution from 435 to 445

Factory Specific Updates

- International factories averaged 118%⁽²⁾ / 119%⁽³⁾ capacity utilization
- Ohio factories averaged 109%⁽²⁾ / 121%⁽³⁾ capacity utilization
- Vietnam factories achieved manufacturing yield of 98%^(2,3)
- Malaysia 2 equipment onsite; potential for production start up delays

Supply Chain and Logistics

- Vertically integrated CdTe manufacturing process has helped mitigate potential operational disruptions
- Forward shipping contracts partially mitigated impacts of higher spot rates

Financial

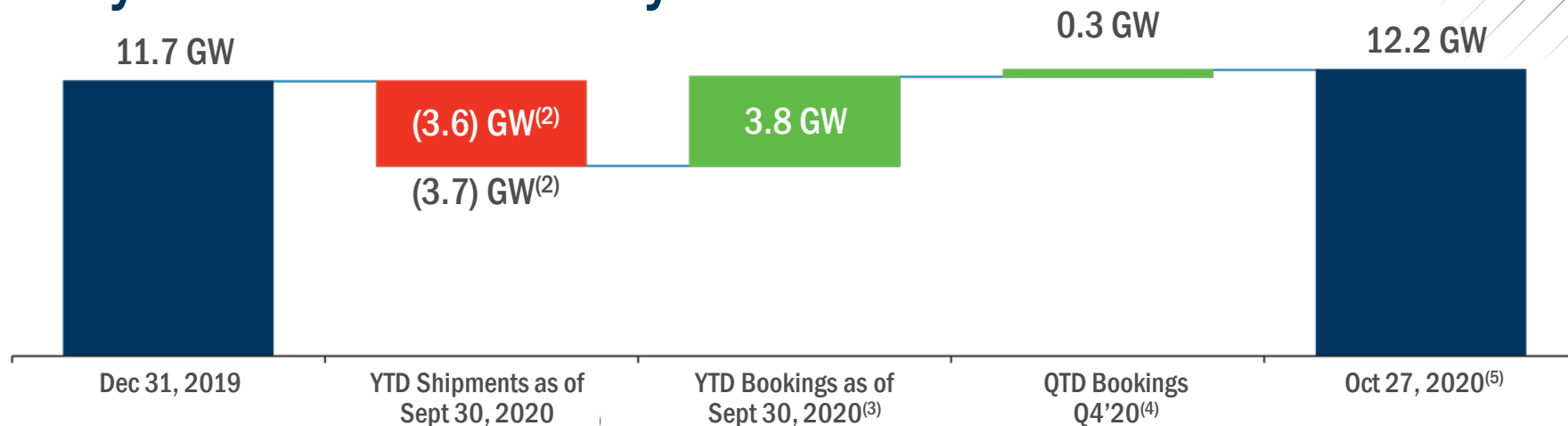
- Module segment gross margin increased on a quarterly basis

(1) Data from January 1, 2020 through October 25, 2020

(2) Data from September 1, 2020 through September 30, 2020

(3) Data from October 1, 2020 through October 25, 2020

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

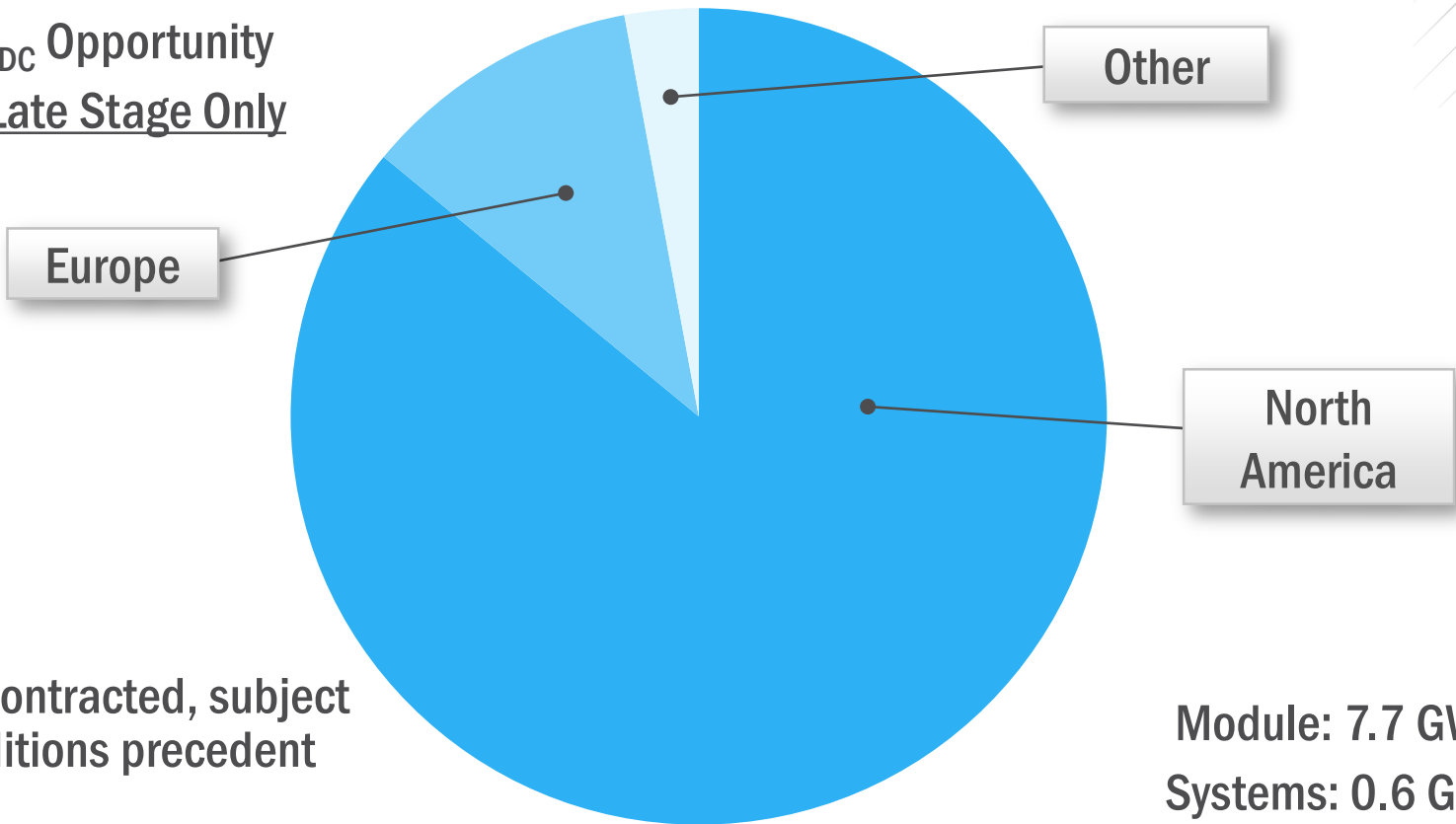


The above table presents the actual module shipments for 2020 through Sept 30, 2020, new module volume bookings through Oct 27, 2020, and the expected module shipments beyond Sept 30, 2020. A module is considered to be shipped when the delivery process to a customer commences and the module leaves one of our facilities. 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) 3.6 GW of net shipments deducted from backlog; 0.1 GW of 3.7 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 Sept 30, 2020.
- (4) Reflects bookings from Oct 1, 2020 to Oct 27, 2020.
- (5) Balance includes remaining shipment volumes as of Sept 30, 2020 and bookings through Oct 27, 2020. Shipments from Oct 1 to Oct 27, 2020 not deducted.

Potential Booking Opportunities: By Geography

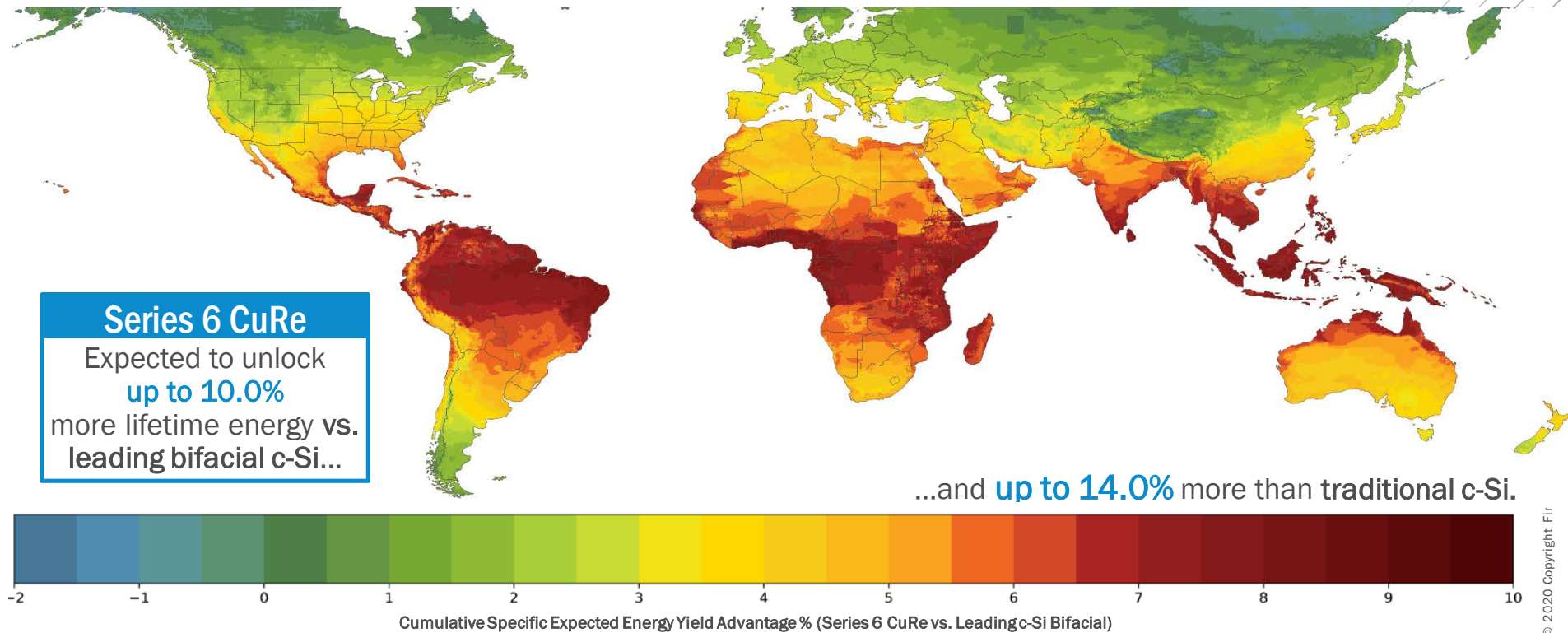
8.3 GW_{DC} Opportunity
Mid-to-Late Stage Only



0.7 GW contracted, subject to conditions precedent

Module: 7.7 GW
Systems: 0.6 GW

Series 6 CuRe vs. Leading c-Si Bifacial Module Expected Energy Yield Advantage Over 30 Years⁽¹⁾



(1) Reflects expected energy yield advantage of our next generation Series 6 CuRe modules as compared to leading c-Si bifacial and traditional c-Si modules, as applicable, over a 30-year project life. We expect to begin delivering Series 6 CuRe modules in the second half of 2021.

Technology, Cost, and Risk | Levers of ASP

	Increased Energy	Lower Cost per Watt (CpW)	Higher BOS	Higher Dev. Costs	Additional Risk
Series 6 CuRe Expectations	Improved efficiency, temperature coefficient, and long-term degradation	Improved efficiency reduces fixed and variable CpW	Minimal change to installation process or support structures	Minimal change to project development or operating costs	No risk associated with backside energy
c-Si Bifacial	Backside energy gain, partially offset by lost front-side wattage	Additional PV glass and reduction in front-side wattage modestly increases variable and fixed CpW	Taller posts needed to maximize backside energy gain	Increased vegetation management costs and insurance premiums associated with cell cracking risk	Energy prediction and albedo uncertainty associated with backside energy gain
c-Si Large Form Factor	Wattage increase often driven by larger form factor, not improved efficiency	Larger form factor reduces fixed CpW, partially offset by added variable costs	Machinery required for installation; Additional support structures needed	Increased insurance premiums associated with cell cracking risk	Larger form factor increases cell cracking and wind load risk
	Accretive to ASP		Dilutive to ASP		

Relative value ascribed to energy, capex, and operating expenses...



...varies by project site, geography, market, energy price, and buyer

Quarterly Income Statement Highlights

(In millions, except per share amounts)⁽¹⁾

	Q3 2020A	Q2 2020A	Q3 2019A	QoQ Change	YoY Change
Net sales	\$928	\$642	\$547	\$285	\$381
Gross profit %	31.6%	21.4%	25.3%	10.2%	6.3%
Selling, general and administrative	50	52	54	(2)	(4)
Research and development	23	22	25	0	(2)
Production start-up	13	6	19	7	(6)
Litigation loss	-	6	-	(6)	-
Operating income (loss)	207	51	41	156	166
Income tax (expense) benefit	(38)	(10)	(15)	(28)	(23)
Net income (loss)	155	37	31	118	124
Net income (loss) per share - diluted	1.45	0.35	0.29	1.10	1.16

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

Quarterly Balance Sheet Highlights

<i>(In millions)</i> ⁽¹⁾	Q3 2020A	Q2 2020A	Q3 2019A	QoQ Change	YoY Change
Cash and marketable securities ⁽²⁾	\$1,671	\$1,642	\$1,637	29	33
Accounts receivable ⁽³⁾	307	352	532	(44)	(225)
Inventories (current and noncurrent)	765	703	729	62	36
Balance of systems parts	34	35	69	(0)	(35)
Property, plant and equipment, net	2,387	2,324	2,107	62	280
PV solar power systems, net	257	466	485	(208)	(227)
Project assets - current and noncurrent	364	382	572	(18)	(208)
Assets held for sale ⁽⁴⁾	35	-	-	35	35
Total assets	6,985	7,073	7,055	(87)	(69)
Long-term debt - current and noncurrent	261	465	480	(204)	(219)
Liabilities held for sale ⁽⁴⁾	13	-	-	13	13
Total liabilities	1,589	1,846	1,872	(257)	(283)
Total stockholders' equity	5,396	5,227	5,182	169	214

(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 agreement to sell our North American O&M operations

Q4'20 Guidance Assumptions



Strategic

- Given the uncertainty around any outcome from the evaluation of strategic options for our U.S. project development business, and the sale timing of our North American O&M business, our fourth quarter guidance assumes no change to our existing lines of business or the potential financial impacts



Shipments

- Fourth quarter module shipments guidance range accounts for potential project, financing, logistics, and customer driven delays



Systems Sales

- Anticipate the Sun Streams 2 project will be sold in Q4'20 or Q1'21
- Fourth quarter guidance range accounts for the financial impact of closing the Sun Streams 2 transaction



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

Q4'20 Guidance as of October 27, 2020

	Q4'20	Implied FY'20
Net Sales	\$540M to \$790M	\$2.6B to \$2.9B
Gross Margin (%) ⁽¹⁾	26.5% to 27.0%	25%
Operating Expenses ⁽²⁾	\$90M to \$95M	\$351M to \$356M
Operating Income ⁽³⁾	\$50M to \$120M	\$310M to \$380M
Earnings Per Share	\$1.00 to \$1.50	\$3.65 to \$4.15
Net Cash Balance ⁽⁴⁾	\$1.2B to \$1.3B	-
Capital Expenditures	\$123M to \$223M	\$450M to \$550M
Shipments	1.8GW to 2.0GW	5.5GW to 5.7GW

(1) Includes \$5 million of ramp costs for FY'20

(2) Includes \$15 million of plant start-up expense for Q4'20 and \$39 million for FY'20

(3) Includes \$44 million of ramp costs and plant start-up expense for FY'20 and \$27 million of Series 4 shutdown and other severance costs for FY'20

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

Summary & Highlights



Financial

- Q3'20 EPS of \$1.45 per share
- \$1.4 billion net cash⁽¹⁾ position
- Module segment gross margin expansion quarter-over-quarter
- Reinstated fourth quarter 2020 financial guidance



Series 6 Manufacturing

- Strong manufacturing performance
- Each factory averaged over 100% capacity utilization in Q3'20
- Achieved our mid-term cost-per-watt target of a 40% reduction below our 2016 Series 4 costs at our Malaysia factory



Bookings

- Continued success adding to contracted backlog
- 1.6 GW of net-bookings since the previous earnings call
- Year-to-date net-bookings of 4.1 GW
- 6.7 GW contracted for deliveries in 2021 and 3.6 GW across 2022 and 2023

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



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