

#### First Solar, Inc. (FSLR) Long Term: 6-12 Months **Zacks Recommendation:** Underperform (Since: 01/01/20) \$57.24 (As of 01/02/20) Prior Recommendation: Neutral Price Target (6-12 Months): \$49.00 5-Strong Sell Short Term: 1-3 Months Zacks Rank: (1-5) VGM:F Zacks Style Scores: Value: D Growth: F Momentum: D

## **Summary**

Given the smaller size of First Solar's current Series 4 CdTe modules compared to certain types of crystalline silicon modules, the company may incur higher labor costs. While the long-term potential of the space is undeniable, the industry faces a number of near-term challenges that will likely keep solar stocks like First Solar under pressure. Moreover, the company will continue to incur substantial production start-up costs associated with the series 6 technology in the near term. The company is also witnessing higher-than-expected labor and sales freight cost. The company's shares have underperformed the industry in the past 12 months. However, with the Series 6 modules enjoying solid demand worldwide, First Solar is investing heftily in production ramp up of this module.

# Price, Consensus & Surprise



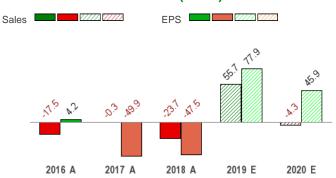
## **Data Overview**

52 Week High-Low	\$69.24 - \$43.98
20 Day Average Volume (sh)	896,568
Market Cap	\$6.0 B
YTD Price Change	2.3%
Beta	1.30
Dividend / Div Yld	\$0.00 / 0.0%
Industry	Solar
Zacks Industry Rank	Top 36% (92 out of 253)

Last EPS Surprise	-72.6%
Last Sales Surprise	-44.8%
EPS F1 Est- 4 week change	-4.9%
Expected Report Date	02/20/2020
Earnings ESP	0.0%

P/E TTM	NA
P/E F1	16.2
PEG F1	0.7
P/S TTM	2.6

## Sales and EPS Growth Rates (Y/Y %)



## Sales Estimates (millions of \$)

\*Quarterly figures may not add up to annual.

	Q1	Q2	Q3	Q4	Annual*
2020	752 E	847 E	907 E	967 E	3,345 E
2019	532 A	585 A	547 A	1,822 E	3,494 E
2018	567 A	309 A	676 A	691 A	2,244 A

## **EPS Estimates**

	Q1	Q2	Q3	Q4	Annual*
2020	\$0.46 E	\$0.78 E	\$0.95 E	\$0.96 E	\$3.53 E
2019	-\$0.64 A	-\$0.18 A	\$0.29 A	\$2.70 E	\$2.42 E
2018	\$0.78 A	-\$0.46 A	\$0.54 A	\$0.49 A	\$1.36 A

The data in the charts and tables, including the Zacks Consensus EPS and Sales estimates, is as of 01/02/2020. The reports text is as of 01/03/2020.

#### Overview

Headquartered in Tempe, AZ First Solar, Inc. designs, manufactures, and sells solar electric power modules using a proprietary thin-film semiconductor technology. The company's solar modules employ a thin layer of cadmium telluride semiconductor material to convert sunlight into electricity. It sells its products to project developers, system integrators and renewable energy project operators primarily in Europe and Germany in particular. First Solar also engages in designing and deploying commercial solar projects for utilities.

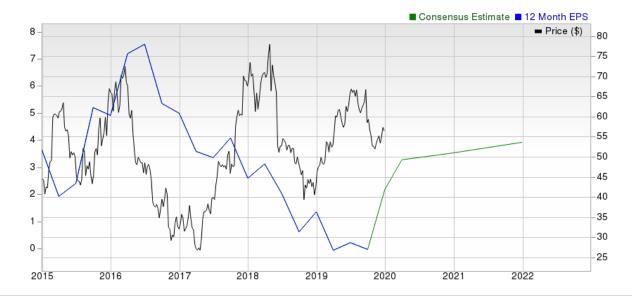
The company was founded in 1999 and incorporated in 2006. Formerly known as First Solar Holdings, LLC, the company changed its name to First Solar Holdings, Inc. and subsequently to First Solar, Inc. in 2006. First Solar operates through two operating segments:

**Modules Segment**: The segment is involved in the design, manufacturing and sale of solar modules.

**Systems Segment:** The segment provides comprehensive PV solar power system solutions, which include project development, engineering, procurement and construction (EPC) services, operation & maintenance (O&M) services and, when required, project financing.







#### **Reasons To Sell:**

While the long-term potential of the space is undeniable, the industry faces a number of nearterm challenges that will likely keep solar stocks like First Solar under pressure. Moreover, given the smaller size of the company's current Series 4 CdTe modules compared to certain types of crystalline silicon modules, the company may incur higher labor and BoS costs associated with the construction of systems using its Series 4 modules. Although the company is progressing in its next generation Series 6 module to resolve this issue, as long as the entire conversion is completed, such higher costs may weigh down the company's profit margin. This might have caused the company to underperform its industry in the past year. The company's shares have risen 23.6% in in the past 12 months compared with the industry's growth of 69.3%.

Intense competition in the solar space, rising production start-up cost, impact of tariifs and unfavorable valuation remian major headwinds.

- ▼ In July 2018, the government of India imposed a safeguard duty on solar cells and modules imported from various countries, including member countries of the Organization for Economic Co-operation and Development, China, and Malaysia, for a two-year period, starting at 25% through July 2019 and declining five percentage points in each subsequent six-month period. In addition, in March 2019, the government of India issued technical guidelines related to the enlistment of approved models and manufacturers of PV solar modules. Pursuant to the regulations, after March 2020, all projects owned by the government or from which energy would be supplied to the government need to procure eligible components from these enlisted manufacturers. The enlistment procedures have certain distinguishing criteria depending on whether a manufacturer is located inside or outside of India, which may restrict First Solar's ability to access the market in India.
- ▼ Although the Series 6 module is expected to boost First Solar's growth in the coming years, the company will continue to incur substantial production start-up costs associated with this new technology and further anticipates higher production ramp-up costs for this module until the full transition is taking place. The company incurred production start-up cost of \$18.6 million in the third quarter, reflecting 2% increase from the year-ago expenses.
- ▼ Moreover, the company's Perrysburg facility is performing behind expectation and facing some significant headwinds. First Solar is facing challenges in terms of building materials, including aluminum and glass as the company is working through its supply chain strategy to mitigate the impact of import tariffs imposed by the U.S. administration. In addition, the company is witnessing higher-than-expected labor and sales freight cost. Such rising expenses can hurt the company's earnings in the near term.

#### **Risks**

- First Solar is undergoing a strategic transition that involves replacement of its legacy manufacturing fleet, over the next several years, with the new Series 6 module. Notably, this new technology possesses the capacity to reduce the number of electrical connections and hardware required for solar system installation. To further ramp up its production rate and capture increased market share, the company started production at its second Perrysburg factory approximately three months ahead of schedule. This marked the fifth Series 6 factory where the company commenced operation within a period of only 18 months. Moreover, it has started construction of its second Ohio factory, wherein production is expected to start in early 2020. With the company aiming to supply 13.8 GW of its Series 4 and Series 6 modules by the end of 2020, production ramp up for its modules in these newly facilities will allow it to meet this target, thereby strengthening its position as the largest U.S. solar module manufacturer.
- With the Series 6 modules enjoying solid demand worldwide, First Solar is investing heftily in production ramp up of this module. Particularly, the company expects its aggregate capital investment for currently planned Series 6 related programs to be approximately \$2 billion, including \$1.6 billion of capital expenditures already made as of Sep 30, 2019. These capital investments are expected to provide an annual Series 6 manufacturing capacity of approximately 6.6 GWdc once completed. During the fourth quarter, it expects to spend \$150 \$250 million for capital expenditures, the majority of which is associated with its Series 6 transition.

Considering the growing demand for solar modules, the company aims to produce 5.4–5.5 GW of solar modules during 2019, of which Series 6 modules will constitute a majority portion. We believe the recent factory constructions and subsequent production ramp up conducted by First Solar in connection to its Series 6 module will enable it to meet this production target. These initiatives are expected to boost the company's cost efficiency in Series 6 manufacturing as well as conversion efficiencies of these modules, thereby bolstering its long-term earnings growth.

## **Last Earnings Report**

### First Solar Q3 Earnings Lag Estimates, Sales Down Y/Y

First Solar reported third-quarter 2019 adjusted earnings of 29 cents per share, missing the Zacks Consensus Estimate of \$1.06 by 72.6%. The reported number, however, grew from the prior-year quarter's loss per share of 18 cents.

#### Sales

First Solar's sales of \$546.8 million in the reported quarter missed the Zacks Consensus Estimate of \$990 million by a massive 44.8%. Moreover, the top line declined 19.1% from the year-ago quarter's \$676.2 million.

Quarter Ending	09/2019		
Report Date	Oct 24, 2019		
Sales Surprise	-44.78%		
EPS Surprise	-72.64%		
Quarterly EPS	0.29		
Annual EPS (TTM)	-0.04		

#### **Operational Highlights**

In the third quarter, gross profit totaled \$138.4 million compared to the gross profit of \$129.1 million registered in the year-ago quarter.

Total operating expenses surged 37.4% to \$97.1 million due to high selling, general and administrative; research and development; and production start-up expenses.

However, the company's operating income at the end of third-quarter 2019 amounted to \$41.3 million, reflecting a 29.4% decline from the operating income of \$58.5 million in the year-ago quarter.

#### **Financial Performance**

First Solar had \$879 million of cash and cash equivalents as of Sep 30, 2019, down from \$1,403.6 million as of Dec 31, 2018.

Long-term debt totaled \$452 million at the end of the third quarter compared with \$461.2 million as of Dec 31, 2018.

#### 2019 Guidance

First Solar updated its 2019 guidance, partially. The company maintains earnings expectations at \$2.25-\$2.75 per share. The Zacks Consensus Estimate for 2019 earnings, pegged at \$2.36, lies below the midpoint

of the company's projected range.

On the top-line front, the company maintains revenue expectations at \$3.5-3.7 billion. The Zacks Consensus Estimates for 2019 sales, pegged at \$3.54 billion, lies below the midpoint of the company's projected view.

However, it lowered full-year operating expenses projection from \$360-\$380 million to \$350-\$370 million and increased gross margin expectation to 19-20% from 18.5-19.5%.

Meanwhile, First Solar maintains its shipment expectations at 5.4-5.6 gigawatts.

#### **Recent News**

On Oct 24, 2019, First Solar announced the start of production at its new photovoltaic (PV) module manufacturing facility in Lake Township, Ohio, its second factory in the United States. First Solar continues to operate its flagship factory in Perrysburg, Ohio, effectively scaling its total annualized production capacity in the U.S. to 1.9-gigawatts (GW)DC.

On **Sep 24, 2019**, First Solar announced that it has signed a multiyear deal to supply more than 1.7 gigawatts (GW) of high-performance Series 6 photovoltaic (PV) thin-film solar modules to Intersect Power, a U.S.-based utility-scale renewable energy developer. First Solar will commence deliveries in the fourth quarter of 2020, which is expected to continue until the end of 2021.

This deal is the single largest order for First Solar's Series 6 modules to date.

## **Valuation**

First Solar's shares are down 13.6% in the past six months period and 23.6% over the trailing 12-month period. Stocks in the Zacks sub-industry are up 0.3%, whereas the Zacks Oils-Energy sector went down 1% in the past six months period. Over the past year, the Zacks sub-industry is up 69.3% whereas the sector is up 2.7%.

The S&P 500 index is up 10.3% in the past six months period and 30.2% in the past year.

The stock is currently trading at 1.73X of forward 12-month sales, which compares to 1.39X for the Zacks sub-industry, 0.9 for the Zacks sector and 3.46X for the S&P 500 index.

Over the past five years, the stock has traded as high as 3.27X and as low as 1X, with a 5-year median of 1.63X. Our Underperform recommendation indicates that the stock will perform in line with the market. Our \$49 price target reflects 1.48X forward 12-month sales.

The table below shows summary valuation data for FSLR

Valuation Multiples - FSLR					
		Stock	Sub-Industry	Sector	S&P 500
	Current	1.73	1.39	0.9	3.46
P/S F12M	5-Year High	3.27	1.47	1.44	3.46
	5-Year Low	1	0.57	0.66	2.54
	5-Year Median	1.63	1	0.99	3
	Current	1.4	1.56	1.17	3.26
EV/SALES F12M	5-Year High	2.13	1.72	2.16	3.37
	5-Year Low	0.24	0.51	0.93	2.3
	5-Year Median	1.05	1	1.33	2.78
	Current	1.16	2.13	1.24	4.45
P/B TTM	5-Year High	1.58	2.33	1.59	4.45
	5-Year Low	0.5	0.6	1.02	2.85
	5-Year Median	1.03	1.29	1.31	3.6

As of 01/02/2020

#### Industry Analysis Zacks Industry Rank: Top 36% (92 out of 253) ■ Industry Price ■ Price -80 -75 Industry 70 65 -60 -55 50 45 40 35 30 -25 2017 2018 2015 2016 2019

# **Top Peers**

Enphase Energy, Inc. (ENPH)	Outperform
JinkoSolar Holding Company Limited (JKS)	Outperform
Canadian Solar Inc. (CSIQ)	Neutral
Sunrun Inc. (RUN)	Neutral
SolarEdge Technologies, Inc. (SEDG)	Neutral
Renesola Ltd. (SOL)	Neutral
SunPower Corporation (SPWR)	Neutral
Vivint Solar, Inc. (VSLR)	Neutral

Industry Comparison Industry: Solar			Industry Peers			
	FSLR Underperform	X Industry	S&P 500	JKS Outperform	SEDG Neutral	SPWR Neutra
VGM Score	E	-	-	E	В	E
Market Cap	6.03 B	23.49 M	23.76 B	1.05 B	4.95 B	1.12
# of Analysts	7	3	13	1	4	
Dividend Yield	0.00%	0.00%	1.78%	0.00%	0.00%	0.00%
Value Score	D	-	-	С	С	D
Cash/Price	0.26	0.19	0.04	1.49	0.07	0.1
EV/EBITDA	18.33	-0.28	13.97	-0.14	30.29	-2.7
PEG Ratio	0.70	0.88	2.02	0.23	0.91	N/
Price/Book (P/B)	1.16	1.46	3.38	0.67	6.63	N/
Price/Cash Flow (P/CF)	21.81	9.11	13.70	3.71	32.64	311.30
P/E (F1)	16.16	19.95	18.83	4.68	19.95	75.7
Price/Sales (P/S)	2.56	1.77	2.68	0.26	3.89	0.6
Earnings Yield	6.17%	2.37%	5.30%	21.35%	5.01%	1.289
Debt/Equity	0.09	0.17	0.72	0.26	0.04	-5.7
Cash Flow (\$/share)	2.62	-0.07	6.94	6.43	3.12	0.0
Growth Score	F	-	-	F	Α	C
Hist. EPS Growth (3-5 yrs)	-33.68%	-13.26%	10.56%	-26.78%	44.41%	N.
Proj. EPS Growth (F1/F0)	45.51%	44.15%	7.41%	105.24%	25.99%	125.33%
Curr. Cash Flow Growth	-29.09%	10.68%	14.83%	54.40%	27.27%	-97.23%
Hist. Cash Flow Growth (3-5 yrs)	-15.80%	8.34%	9.00%	6.91%	49.30%	-58.29%
Current Ratio	4.00	1.07	1.23	0.95	2.49	1.3
Debt/Capital	8.02%	22.85%	42.92%	20.41%	4.31%	N/
Net Margin	-0.14%	-2.42%	11.08%	2.27%	8.39%	-8.24%
Return on Equity	-0.07%	-15.89%	17.10%	6.70%	15.89%	N.
Sales/Assets	0.33	0.59	0.55	0.68	1.08	0.8
Proj. Sales Growth (F1/F0)	-4.25%	16.36%	4.20%	25.51%	15.88%	14.43%
Momentum Score	D	-	-	D	D	F
Daily Price Chg	2.29%	0.38%	0.33%	6.00%	7.07%	0.38%
1 Week Price Chg	-1.57%	-0.84%	0.13%	2.91%	-0.78%	3.24%
4 Week Price Chg	9.45%	7.38%	3.31%	20.59%	22.83%	10.52%
12 Week Price Chg	1.08%	0.00%	9.70%	50.98%	15.18%	-19.90%
52 Week Price Chg	31.77%	35.78%	30.28%	136.04%	186.79%	55.36%
20 Day Average Volume	896,568	48,624	1,603,615	889,142	1,148,298	2,445,40
(F1) EPS Est 1 week change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 4 week change	-4.89%	-1.30%	0.00%	0.00%	0.00%	0.00%
(F1) EPS Est 12 week change	-5.08%	-7.87%	-0.57%	30.18%	7.59%	-48.439
(Q1) EPS Est Mthly Chg	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

## **Zacks Stock Rating System**

We offer two rating systems that take into account investors' holding horizons: Zacks Rank and Zacks Recommendation. Each provides valuable insights into the future profitability of the stock and can be used separately or in combination with each other depending on your investment style.

#### **Zacks Recommendation**

The Zacks Recommendation aims to predict performance over the next 6 to 12 months. The foundation for the quantitatively determined Zacks Recommendation is trends in the company's estimate revisions and earnings outlook. The Zacks Recommendation is broken down into 3 Levels; Outperform, Neutral and Underperform. Unlike many Wall Street firms, we have an excellent balance between the number of Outperform and Neutral recommendations. Our team of 70 analysts are fully versed in the benefits of earnings estimate revisions and how that is harnessed through the Zacks quantitative rating system. But we have given our analysts the ability to override the Zacks Recommendation for the 1200 stocks that they follow. The reason for the analyst over-rides is that there are often factors such as valuation, industry conditions and management effectiveness that a trained investment professional can spot better than a quantitative model.

#### **Zacks Rank**

The Zacks Rank is our short-term rating system that is most effective over the one- to three-month holding horizon. The underlying driver for the quantitatively-determined Zacks Rank is the same as the Zacks Recommendation, and reflects trends in earnings estimate revisions.

## **Zacks Style Scores**

The Zacks Style Score is as a complementary indicator to the Zacks rating system, giving investors a way to focus on the highest rated stocks that best fit their own stock picking preferences.

Academic research has proven that stocks with the best Value, Growth and Momentum characteristics outperform the market. The Zacks Style Scores rate stocks on each of these individual styles and assigns a rating of A, B, C, D and F. We also produce the VGM Score (V for Value, G for Growth and M for Momentum), which combines the weighted average of the individual Style Scores into one score. This is perfectly suited for those who want their stocks to have the best scores across the board.



As an investor, you want to buy stocks with the highest probability of success. That means buying stocks with a Zacks Recommendation of Outperform, which also has a Style Score of an A or a B.

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