

First Solar: FSLR

Introduction

First Solar is a provider of photovoltaic (PV) solar energy solutions. They design, manufacture, and sell PV solar modules with a thin-film semiconductor technology. They also develop, design, construct and sell PV solar power systems that use the modules it manufactures. We recommend buying the stock with a 3-5 year timeframe in mind, as the industry has been beaten down due to many bankruptcies, and the recovery may take some time due to pricing pressure. However, FSLR has a rock-solid balance sheet and is a pioneer for thin-film solar panels.

5 Year Price Chart



Competitive Landscape

Competitive Landscape	Market cap (millions)	P/B	P/S	EV/EBITDA
FSLR	2,810	0.55	0.97	1.97
SPWR	876	0.9	0.35	-
CSIQ	727	0.8	0.26	14.19
TSL	1,070	0.94	0.35	-
JKS	554	0.6	0.2	5.53
HQCL	540	1.39	0.23	4.6

Why is the stock down so much?

2016 was a terrible year in general for US solar companies. SunEdison went bankrupt, Solar City collapsed (requiring a Tesla bailout), and Vivint Solar lost 70% of its value. The solar industry exhibited tech-bubble-like popularity, while people did not truly understand the difficulties the industry was going through. Chinese manufacturers flooded the market with solar products, driving the price down for premier manufacturers like FSLR. As selling prices decreased, input costs did not, resulting in a difficult couple of years for companies like FSLR.

In addition, FSLR had lower revenue, and negative net income in 2016. However, these numbers are actually not as bad as they may appear. Revenue was down primarily due to the sale of two solar projects – Lost Hills and North Star. Net income, which was -\$358 million, included a 1-time expense of \$818 million. This expense was 81% due to the cancellation of their series 5 products, shifting entirely to the newer series 6.

Bull Thesis

The majority of FSLR's enterprise value is now comprised of net cash (Cash minus debt). They have \$1.7 billion in cash, with a market capitalization of \$2.81 billion. This will provide a safety net in the stock, as the share price cannot be justified to trade at anywhere near that level. Doing so would value the entire company only for their cash position, while valuing the real solar business (and future earning potential) at 0.

FSLR has the most advanced solar technology in the industry, and are the leader in research, spending 4% of their revenue on research and development. They specialize in 'thin-film' cadmium-based solar panels, which have strong efficiency, strong durability, and are extremely lightweight. Thin-film panels are far more convenient to use, while also boasting a higher potential efficiency than traditional models.

Another factor that could drive future growth is due to a potential import tax on Chinese solar panels. While not guaranteed, if enacted, this tax would make FSLR products extremely competitive in the US, and would be a huge boost to revenue. Demand from electric utilities should pick up in 2018, as most utility companies have already exhausted their 2017 purchases due to a policy shift in tax credits from the government.

Risks

- The Chinese continue to flood the market, driving down prices
- Donald Trump makes solar energy less appealing
- Volatile pricing and demand

Financials

Income Statement (millions)	2014	2015	2016	2017E	2018E	2019E	2020E
Revenue	3,391	3,579	2,951	2,850	3,025	3,211	4,050
COGS	2,566	2,659	2,247	2,138	2,269	2,408	3,038
Gross Profit	825	919	704	713	756	803	1,013
SGA	259	272	263	228	242	257	324
Net Income	395	546	-358	-52	52.5	52.5	735

Valuation:	
Enterprise Value	\$1.1 billion
Market Cap	\$2.81 billion
Cash	\$1.7 billion
Multiples:	
P/S	0.55
P/B	0.97
EV/EBITDA	1.97

Balance Sheet (millions)	2014	2015	2016
Cash and Equivalents	1,991	1,830	1,955
Inventory	505	380	363
Total CA	3,077	3,345	3,787
PPE	2,600	2,717	2,608
Total Assets	6,720	7,316	6,867
Current Liabilities	1,000	961	900
Long Term Debt	162	251	160
Total Debt	213	289	188

Current Ratio	1.99	1.90	2.17
Debt/Assets	3.17%	3.95%	2.74%