

FuelCell Energy Inc.

NASDAQ: FCEL

Analyst: Michael Post

Sector: Energy

SELL

Price Target: \$5.00

Key Statistics as of 4/27/2016

Market Price:	\$6.53
Industry:	Renewable Energy
Market Cap:	\$195 M
52-Week Range:	\$4.51 – 15.72
Beta:	2.04

Thesis Points:

1. FCEL must build more facilities and will continue to incur operational issues in the near term.
2. FCEL is losing money and shareholder value
3. FCEL is a deteriorating hyper inflated stock propped up on over promise and hopeful projects.

Company Description:

FuelCell Energy, Inc. (NASDAQ: FCEL) is an integrated fuel cell company that designs, manufactures, installs, operates and services stationary fuel cell power plants for distributed power generation. Its power plants electrochemically produce electricity and heat using various fuels including natural gas, biogas, methanol, diesel, coal gas, coal mine methane, and propane. The company serves utilities, independent power producers, governments, gas transmission control, industrial and data centers, commercial purposes, oil production and refining services, wastewater treatment, agriculture, and landfill gas sectors. The company operates in the United States, South Korea, England, Germany, Canada, Spain, and offers a comprehensive portfolio of services for fuel cell power plants. FuelCell Energy has specially trained technicians and engineers that remotely operate and maintain virtually all installed power plants globally, 24 hours per day, 365 days per year from the state-of-the-art Global Technical Assistance Center, located at Danbury, Connecticut (headquarters).

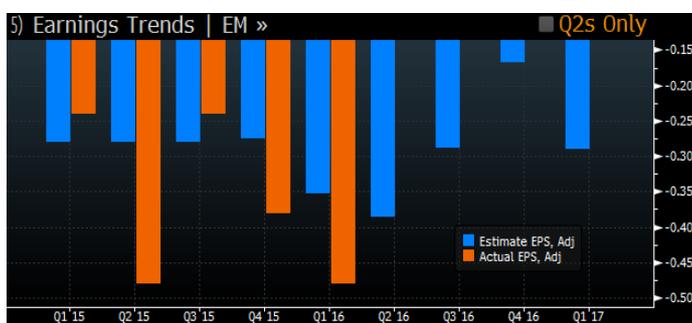


Company Review- FCEL

FuelCell Energy (FCEL) is a world leader in renewable energy creation and specializes in developing cleaner energy solutions. The company began expanding globally in 2007 through its partnership with POSCO Energy, and targeted markets in Southeast Asia, particularly South Korea. The renewable energy industry was rapidly growing until oil price began its steep decline. Cheaper oil prices decreased the appeal of more costly renewable energy solutions and caused declining revenue and prolonged projects for FuelCell Energy. Currently, FCEL is unable to produce energy in a profitable process given current market conditions and appears dependent on an innovative cost saving breakthrough or an increase in oil prices.

Thesis Point 1 – Ongoing Issues

FCEL's total backlog was \$403.9 million as of January 31, 2016 compared to \$337 million as of January 31, 2015. This change represents a roughly 20% increase over a one year period and exemplifies FCEL's inability to meet growing demand. Chief executive officer, Chip Bottone, considers the backlog increase to be a positive sign and thinks that after the completion of a few in progress facilities FCEL will be able to achieve overall profitability. While this may be ideally true, investors have only experienced and will continue to experience depressing revenue recognition from postponed unfinished plant projects and increased losses from prolonged associated costs. Management has justified decreasing revenue by glorifying increasing backlog but the repeated earning disappointments will continue to depreciate FCEL's stock price in 2016.



Quarter one of 2016 repeated this negative trend as FCEL posted wider than expected losses and missed revenue expectations again. Management responded to the negative results with forward looking statements that more revenue will be recognized in the second half of the year after the Beacon Falls Energy Park project is hopefully completed. This is a major indicator that investors can expect another

negative quarter coming in Q2 of 2016.

Thesis Point 2 – Negative Trends

FCEL has posted net losses every year of operations and can only survive by draining equity investors through multiple secondary public offerings and reverse stock splits. The company most recently effected a 1-for-12 reverse stock split on December 3, 2015. In Q1 of 2016, FCEL posted an increased net loss of 11.7 million compared to 4.1 million a year ago in Q1 of 2015.

Chart Selected Items	3 months FQ1/CQ4	3 months FQ2/CQ1	3 months FQ3/CQ2	3 months FQ4/CQ3	3 months FQ1/CQ4
For the Fiscal Period Ending	Jan-31-2015	Apr-30-2015	Jul-31-2015	Oct-31-2015	Jan-31-2016
Currency	USD	USD	USD	USD	USD
Net Income	(4.1)	(9.9)	(6.5)	(8.9)	(11.7)

Accompanying this net loss, accrued expenses also increased from 14.9 to 24.8 million and long term debt increased to 36.9 million from 21 million comparing Q4 of 2015 to Q1 of 2016. In order to eliminate some liquidity issues, FCEL increased its debt by closing on a 25 million dollar loan planned for working capital purposes in 2016. Currently, FCEL has almost 77 million in cash on hand, but will soon enter a period of financial distress from continued capital expenditures for completing ongoing energy facility projects. Investors should expect another secondary offering to occur if FCEL cannot complete its energy facilities and achieve profitability from greater output and benefits associated with greater economies of scale. A secondary offering is most likely to occur when the loan become due in early 2018 at which point FCEL will most likely have drained the remainder of its cash balance from accrued losses over 2016 and 2017.

Thesis Point 3- Early & Overly Hyped

FuelCell Energy thrives on the growing potential of an industry with increasing demand but suffers from unfavorable market conditions and costly elongated construction projects. While the big picture remains intact, the road to success seems to be lined with investor suffrage that will continue until FCEL has established enough facilities to generate an overall profitable output. At this point, FCEL is in an unpredictable constructions phase with inaccurate project completion estimates and a growing backlog of unserved customers. The company's stock price has deteriorated throughout the course of this process and will continue to until the construction phase is complete and overall energy output is at profitable levels. Important to note, low oil prices are delaying

output levels and postponing contracts that otherwise would have already been completed. This is causing very unprofitable operations and will continue hurting the company in 2016 until FCEL can operate at a higher capacity and record more revenue. The information below shows how unprofitable the company has been and the long way of needed improvement that FCEL must achieve to become a successful company.

12 Months Ending	10/31/2013	10/31/2014	10/31/2015	01/31/2016
Operating Margin	-15.89	-15.15	-17.72	-22.78
Return on Invested Capital	-33.67	-22.67	-16.83	-19.85

FCEL is projected to have lower operating margins in 2016 resulting from increased spending on ongoing energy facility projects. Return on invested capital is also projected to decrease because of postponed revenue recognition procedures. This all seems extremely negative but if successful will position the company for possible profitable growth in 2017 and beyond. However, the rest of 2016 will be a building period surrounded by uncertainty. Macroeconomic factors will most likely continue to prolong this building phase and investors will have to wait longer and suffer more losses.

Conclusion

FuelCell Energy is currently in a construction phase and has been for the past 8 years of operations. The company is attempting to create enough energy generating facilities to meet demand and produce at profitable levels. This mission is being prolonged by macroeconomic factors like cheap oil prices and is forcing FCEL to miss expectations and remain extremely unprofitable. I expect that this trend will continue for the rest of 2016 as it did in Q1, and optimistic FCEL investors will be disappointed by postponed project completion dates. Backlog will continue to increase in 2016 and revenue will continue to disappoint. Overall, I recommend FCEL as a short sale for the year of 2016 until the company can prove ongoing facility energy projects will be completed in a correctly estimated timely manner. I calculated an intrinsic value of \$5.00 a share which represents an approximate 25% return based on its current stock price of \$6.53.

FuelCell Energy Inc. (fcel)

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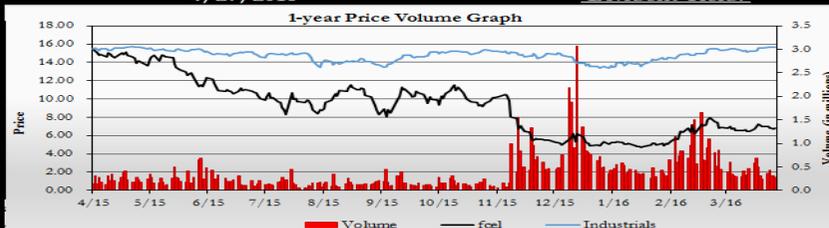
NEUTRAL

Analysis by Michael Post
4/27/2016

Current Price: **\$6.53**
Dividend Yield: **0.0%**

Intrinsic Value: **\$5.00**
Target Price: **\$6.74**

Target 1 year Return: **3.14%**
Probability of Price Increase: **66%**



Description
FuelCell Energy, Inc., together with its subsidiaries, designs, manufactures, sells, installs, operates, and services stationary fuel cell power plants for distributed power generation.

General Information
Sector: Industrials
Industry: Electrical Equipment
Last Guidance: November 3, 2015
Next earnings date: June 3, 2016
Estimated Country Risk Premium: 6.02%
Effective Tax rate: 31%
Effective Operating Tax rate: 31%

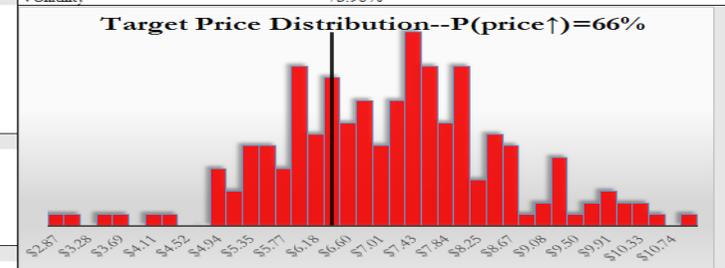
Market Data	
Market Capitalization	\$192.44
Daily volume (mil)	0.31
Shares outstanding (mil)	28.98
Diluted shares outstanding (mil)	25.13
% shares held by institutions	20%
% shares held by investments Managers	15%
% shares held by hedge funds	3%
% shares held by insiders	2.03%
Short interest	11.98%
Days to cover short interest	6.42
52 week high	\$15.72
52-week low	\$4.51
Levered Beta	1.29
Volatility	73.90%

Past Earning Surprises

Quarter ending	Revenue	EBITDA
1/31/2015	-19.85%	-228.53%
4/30/2015	-33.49%	-305.52%
7/31/2015	-12.92%	-278.59%
10/31/2015	9.81%	-262.27%
1/31/2016	-6.81%	-261.41%
Mean	-12.65%	-267.27%
Standard error	7.2%	

Peers

Plug Power Inc.
Energy Focus, Inc.
SolarCity Corporation
Acuity Brands, Inc.
Hydrogenics Corporation



Management

Management	Position
Bottone, Arthur	Chief Executive Officer, Pre
Bishop, Michael	Chief Financial Officer, Sen
Rauseo, Anthony	Chief Operating Officer and
Goddard, Kurt	Vice President of Investor R
Bradford, Darrell	Vice President of Human Reso

Total compensations growth

24.3% per annum over 5y
10.55% per annum over 4y
12.85% per annum over 5y
N/M
N/M
N/M

Total return to shareholders

-1.69% per annum over 5y
-2.16% per annum over 4y
-1.69% per annum over 5y
N/M
N/M
N/M

Profitability

	fcel (LTM)	fcel (5 years historical average)	Industry (LTM)
ROIC	-1.1%	-5.72%	13.28%
NOPAT Margin	-2%	-6.27%	12.7%
Revenue/Invested Capital	0.56	0.91	1.05
ROE	-2.5%	-12.00%	15.29%
Adjusted net margin	-3%	-7.94%	11.8%
Revenue/Adjusted Book Value	0.73	1.51	1.30

Invested Funds

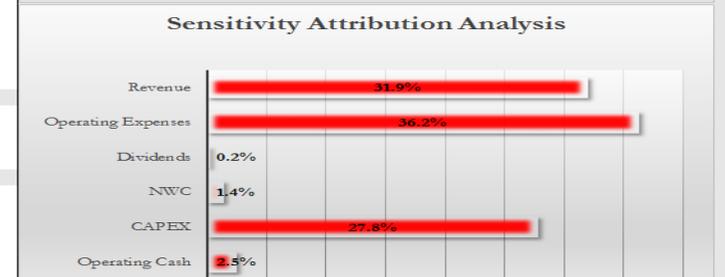
	fcel (LTM)	fcel (5 years historical average)	Industry (LTM)
Total Cash/Total Capital	27.7%	32.6%	22%
Estimated Operating Cash/Total Capital	25.8%	30.9%	N/A
Non-cash working Capital/Total Capital	20.2%	22.8%	15%
Invested Capital/Total Capital	119.7%	126.8%	77%

Capital Structure

	fcel (LTM)	fcel (5 years historical average)	Industry (LTM)
Total Debt/Common Equity (LTM)	0.36	0.16	0.19
Cost of Existing Debt	9.20%	9.39%	4.24%
Estimated Cost of new Borrowing	6.13%	9.39%	4.24%
CGFS Risk Rating	D	D	BBB
Unlevered Beta (LTM)	1.17	1.12	1.19
WACC	11.19%	10.37%	10.68%

Porter's 5 forces (scores are out of 100)

Bargaining Power of Suppliers	44
Bargaining Power of Customers	50
Threat of New Competition	71
Intensity of Existing Rivalry	42
Threat of Substitutes	75
Overall	58



Valuation

Period	Revenue growth	NOPAT margin	ROIC/WACC
Base Year	0.0%	-1.9%	-0.10
1/31/2017	20.0%	9.9%	0.58
1/31/2018	18.0%	12.1%	0.75
1/31/2019	15.0%	13.2%	0.81
1/31/2020	10.0%	14.0%	0.84
1/31/2021	8.0%	14.3%	0.84
1/31/2022	6.0%	14.4%	0.82
1/31/2023	5.0%	14.6%	0.82
1/31/2024	4.0%	14.8%	0.82
1/31/2025	3.0%	15.2%	0.83
1/31/2026	2.0%	15.5%	0.83
Continuing Period	2.0%	15.7%	0.84

Net Claims

Period	Invested Capital	Net Claims	Price per share
Base Year	\$87.80	\$105.25	\$4.42
1/31/2017	\$154.79	\$112.78	\$6.05
1/31/2018	\$201.26	\$116.37	\$8.12
1/31/2019	\$294.00	\$108.02	\$10.60
1/31/2020	\$319.42	\$82.32	\$13.41
1/31/2021	\$332.26	\$46.94	\$16.41
1/31/2022	\$378.21	\$2.56	\$19.52
1/31/2023	\$435.81	-\$48.33	\$22.69
1/31/2024	\$493.53	-\$106.61	\$25.94
1/31/2025	\$542.62	-\$170.65	\$29.22
1/31/2026	\$586.36	-\$240.99	\$32.52
Continuing Period			

Q-4

Q-3

Q-2

Q-1

Q-0