Energy Focus Inc.

NasdaqCM:EFOI

Analyst: Skyler Scavone
Sector: Consumer Discretionary

BUY

Price Target: $5.9

Key Statistics as of 3/4/2014

Market Price:	$4.68
Industry:	Electrical Equipment
Market Cap:	$44.2 M
52-Week Range:	$3.95-10.71
Beta:	2.31

Thesis Points:

- Strategic repositioning to capitalize on industry trends
- Enough addressable market in the military and maritime segment alone to drive growth
- Introduction of performance based compensation

Company Description:

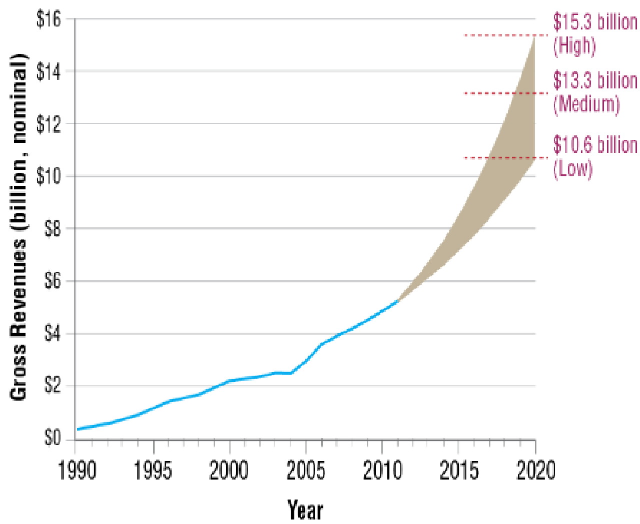
Energy Focus, Inc. (incorporated 2007) and its subsidiaries designs, develops, manufactures, and markets energy-efficient LED lighting products in the United States and internationally. It is also a leading provider of turnkey, energy-efficient lighting retrofit solutions. The “product” segment offers energy-efficient LED lightings for commercial and industrial markets, as well as militaries. The other main segment, “solutions”, focuses on providing turnkey, high-quality, energy-efficient LED lighting application alternatives. Through its two segments the company is seeking to continue to penetrate the existing building and military and maritime lighting markets, while selecting only the most economically compelling options.

Thesis

Energy Focus, Inc. is a leading company in the energy-efficient lighting business strategically positioned to capitalize on promising industry outlooks. It differentiates itself with industry leading technology, in terms of efficiency and cost. The company is a BUY because FY 2015 will be the year profits are generated, as it is time for its investments to generate returns. With recent performance based incentives, and repositioning, the firm is in an ideal position to capture strong market forces and start generating profit. Furthermore this repositioning is not completely reflected in the current price which understates margins. Regardless of the fairness of the current price overall firm growth will drive the price higher than current levels.

Repositioning for growth

As of FY 2014, Energy Focus began a shift of focus from the solutions segment to the products segment. This means a shift from turnkey LED ESCO (Energy Savings Company) solutions to turnkey LED commercial solutions as evidenced from Q1-Q3 2014; solutions sales went from 45% of total sales to 2.5%, with the product segment percentages inversely shifting. This represents a turning point for the company as it works to align its resources in the production of LED products. Resulting from this transition are additional available resources for a promising commercial, industrial, and military lighting market. Commercial and industrial versus residential energy use in terms of lumen production is ~90% showing huge potential for untapped energy savings. S&P 500 companies reporting sustainability rose from 20% to 72% from 2011-2013, a promising statistic for an LED company that provides a substitute for traditional lighting at an investment that is a fifth of installing solar power (based on CO2 reduced). This changing scope of focus led to a Q3 YoY government net sales increase of 748.9%. Further growth here is anticipated due to successful listing on the GSA schedules, which composed of pre-negotiated contracts with qualified suppliers that have passed stringent standards. Lighting accounts for 25% of total energy usage in government buildings, with 50% energy efficiency savings the carbon footprint could be reduced 10% by switching to LEDs today. The EPA calling for a 30% cut in carbon emissions by 2030 and a payback of only a few years for EFOI will expedite the adoption of LEDs. Further accelerating implementation is the price of electricity that has risen 50% since 2004. Commercially (expected 14% CAGR 2013-2018, $3.6b-6.8b), the focus is on five channels: national retailers, property management companies, hospitals, universities and parking garages: each a multi-billion dollar industry. Energy Focus landed Wayne State University one of the first in the country to adopt LEDs; "early wins" provide strong referrals for securing future projects. The agricultural vertical, also a multibillion dollar opportunity, is another area being studied for future penetration; the company seeks to be a leader in a particular vertical before moving on to the next, but having alternative areas for growth is a positive prospect for long term organic growth. This shift to the product (commercial) segment was apparent as early as Q2 2014 when Energy Focus was selected as a preferred LED lighting vendor by a leading global real estate company (500m sq. ft. in the US), indicating optimistic prospects for this young segment. Industrially, (expected 11% CAGR 2013-2018, $1.4b-2.3b) the company has begun working with parking garages of which a partial case in Louisville is already saving $410k annually. Furthermore, "on land", the company looks to replace existing FL and HID fixtures (addressable global market $120b) of which energy savings are 50-75%, current LED adoption here is less than 2%. In addition, this past quarter Energy Focus has closed its Nashville office and opened a Washington D.C. office. Management hopes this will further propel penetration in the ESCO market (growth below):



This geographically strategic office opening coupled with the GSA listing puts the firm in a position to exploit this rapid ESCO growth. Regardless of the fairness of current market pricing, which will be discussed later, the industry outlook for Energy Focus is encouraging. With the shift in vision, sales, margins and lead times are improving, with profitability in the very near future/

Vast opportunity in military and maritime verticals

The most intriguing aspect of Energy Focus' future falls in the military and maritime segment. The U.S. Navy, Military Sea Command (MSC) and the Coast Guard represent a $530m market. Today, the firm is the only approved LED lighting supplier to the U.S. Navy and has received $53 million in R&D contracts since 2002 (first product on a Navy ship in 2007). In Q3 Navy unit shipments tripled with orders of $15.6m but only represent 10% penetration. With this news alone the stock price surged 40% to $10.71 and pulled back to the $5.50-7$ range until Q2 earnings sent the stock to current levels. In Q2, Navy penetration was 5% and management expected it "double over the next few quarters", but this order alone brought it up 400%. With 0% failure rate and positive reviews from top to bottom, the Navy is fast tracking its adoption of LEDs. It should be noted that these revenues ($15.6m) will be recognized upon installation through June of 2015. With the U.S. Navy investing $2b to increase energy efficiency and to transition to a "Green Fleet" by 2016, there is no reason to believe this won't continue. Following are the annual costs of lightning maintenance for the U.S. Navy:

	Ballast Cost	Lamp Cost
Taken from USN Post Graduate Study for Unit costs	$ 12.00	$ 3.95
6% ballast & 100% Lamp failures per year	60,000	1,000,000
2009 GSA Material cost	$ 720,000.00	$ 3,950,000.00
2010 E1-E4 Composite pay Labor Cost	$ 2,636,100.00	$ 14,645,000.00
Annual Costs of Lighting Maintenance	**$ 3,356,100.00**	**$ 18,595,000.00**

Savings from an Intellitube (designed for Navy):

Initial Investment	-$300,000
Annual Power Savings (1-5 Year)	$117,180
Annual Power Savings (6-10 Year)	$143,640
Maintenance (ballast removal at 5th Year)	-$87,000
Rebate	$48,825
Simple payback wo. rebate (Yrs)	2.56
Simple payback w. rebate (yrs)	2.14
NPV	**$755,221**
IRR	**44%**

The Navy has invested heavily in Energy Focus' R&D and is now starting to cash in on this investment. In terms of MSC and Coast Guard ($280m market), during the last earnings call management hinted that significant progress is being made with these two entities as well as the commercial maritime market ($2.9b market) which is expected to come to fruition in 2015.

Fundamentals and financials suggest undervaluation

As mentioned previously not only has this shift in scope led to increased future growth opportunity, it has also allowed the firm to improve from a financial standpoint. In only one quarter with a reduced solutions segment, the gross margin in Q3 was up 2 percentage points to 34.5% (excluding the reduced solutions segments). Including the solutions segment gross margin saw a .1 percentage point decrease, which explains the 33% predicted gross margin for Q4. However this margin is a bit understated because already through one quarter of this shift in focus the margin was at 34.5%, surely it has no reason to pull back this quarter with scales only increasing. Additionally, Q4 estimates have gross profit at -2.08; however this number also undervalues the stock. In Q3, NOL was -5.11 but would have been -2.4 excluding the 2.7m onetime cost of divesting the Nashville site. This is not taking into account the drastic change to the sales channel. In the past 2 quarters NOL has decreased by 73.46 and 4.17 percentages points respectfully. Without this onetime cost and continued trends of margin improvement I expect this -2.08 NOL, which is actually only a decrease of .32 percentage points from last quarter's relevant gross profit, to be surpassed this quarter (ER 3/12). Furthermore, FY 2015 estimates are off base. Again, the expected gross margins is below the true level achieved in Q3 2014, which is not likely with the economies of scale to be experienced in 2015. Estimates have Energy Focus turning profitable in 2016, but this is late. Catalysts are happening faster than the firm itself predicted (quicker Navy adoption) and this is not being reflected in next year's estimates. One does not know what the sales levels will be, but I also see the top line as understated. FY 2015 predicts 19% top line growth then jumps up to 49% in 2016. While this 2016 growth might be overstated this is not in the investment horizon of concern. Naval adoption is happening faster than predicted with Coast Guard and MNC adoption happening soon. FY 2016 growth will not be 49%, some of this top line growth will happen in 2015 suggesting an under estimation. With all of these factors united with the recent implementation of performance based compensation at all levels FY 2015 will be the year Energy Focus reaches profitability.

Performance Based Compensation

In 2014, for the first time in company history, a bonus incentive plan for employees and executive management has been implemented. Though not as big of a price driver as the previous two thesis points, the timing of this implementation is promising for a company on the verge of profitability. For management these incentives will be based on "performance" and net operating income relative to the 2014 operating plan. This assures shareholders that management and employees will work accomplish what is said to be a goal. With such a shift in scope this year the 2015 operating plan will differ drastically from 2014 but will continue to promote a generation net operating income. Furthermore, executives are also awarded based on established key performance indicators. Giving management incentives to not only produce top line growth but income as well is a positive sign for investors.

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Energy Focus, Inc.	EFOI	Analyst	Current Price	Intrinsic Value	Target Value	Divident Yield	Target Return	NEUTRAL
		Skyler Scavone	$4.69	$5.32	$5.91	0%	26.12%	

General Info

Sector	Industrials
Industry	Electrical Equipment
Last Guidance	Nov-13-2014
Next earnings date	3/27/2015

Market Data

Enterprise value	$38.42
Market Capitalization	$44.17
Daily volume	0.01
Shares outstanding	9.42
Diluted shares outstanding	6.73
% shares held by institutions	21.74%
% shares held by insiders	24.51%
Short interest	0.90%
Days to cover short interest	1.84
52 week high	$10.71
52-week low	$3.95
5y Beta	1.38
6-month volatility	88.67%

Peers	Market Cap.
Capstone Companies, Inc.	$15.63
Lena Lighting Spólka Akcyjna	$115.42
Revolution Lighting Technologies, Inc.	$146.67
Huayue Electronics, Inc.	$28.20
Vu1 Corporation.	$11.86
TCP International Holdings Ltd.	$78.10
Carmanah Technologies Corp.	$67.74

Current Capital Structure

Total debt/market cap	2.56%
Cost of Borrowing	99.56%
Interest Coverage	-98.33%
Altman Z	-2.34
Debt Rating	D
Levered Beta	1.30
WACC (based on market value weights)	9.53%

Management

Professional	Title	Comp. FY2011	Comp. FY2012	Comp. FY2013
Tu, James	Executive Chairman and Chief E	$ -	$ 1,071.00	$ 238,692.00
Hillard, Eric	President and Chief Operating C	$ 205,153.00	$ 183,157.00	$ 235,711.00
Cheng, Simon	Executive Director	$ -	$ 10,018.00	$ 40,886.00
Davenport, John	Executive Director	$ -	$ -	$ 64,370.00
Miller, Marcia	Interim Chief Financial Officer	$ -	$ -	$ -
Matrisciano, Theresa	Vice President of Human Resou:	$ -	$ -	$ -

Historical Performance

	EFOI	Peers	Industry	All U.S. firms
Growth	-5.6%	7.3%	6.0%	6.0%
Retention Ratio		207.7%	40.9%	61.6%
ROIC		2.1%	29.6%	11.8%
EBITA Margin	-23.6%	5.2%	11.3%	13.7%
Revenues/Invested capital	55.6%	183.1%	153.0%	202.3%
Excess Cash/Revenue	13.3%	14.5%	15.9%	18.5%
Unlevered Beta	0.55	0.36	1.19	0.95
TEV/REV	1.0x	1.1x	2.0x	2.4x
TEV/EBITDA	267.4x	16.6x	10.9x	11.3x
TEV/EBITA		23.1x	13.4x	15.4x
TEV/UFCF		28.2x	26.5x	26.8x

Past Earning Surprises

	Revenue	EBITDA	Norm. EPS
Last Quarter	0.0%	0.0%	0.0%
Last Quarter-1	0.0%	0.0%	0.0%
Last Quarter -2	0.0%	0.0%	0.0%
Last Quarter -3	0.0%	0.0%	0.0%
Last Quarter -4	0.0%	0.0%	0.0%

Non GAAP Adjustments

Operating Leases Capitalization	100%	Straightline	10 years
R&D Exp. Capitalization	100%	Straightline	10 years
Expl./Drilling Exp. Capitalization	0%	N/A	N/A
SG&A Capitalization	20%	Straightline	10 years

Proforma Assumptions

		Period	Rev. Growth	Adj. Op. Cost/Rev
Operating. Cash/Cash	0.0%	LTM	19%	96%
Unlevered Beta	1.20	LTM+1Y	20%	81%
Rev/Invested Capital	100.0%	LTM+2Y	23%	78%
Continuing Period Revenue Growth	5.0%	LTM+3Y	20%	77%
Long Term ROIC	12.8%	LTM+4Y	17%	75%
Invested Capital Growth	Equals to Maintenance	LTM+5Y	15%	73%
Justified TEV/REV	1.9x	LTM+6Y	14%	73%
Justified TEV/EBITDA	9.0x	LTM+7Y	12%	73%
Justified TEV/EBITA	12.5x	LTM+8Y	10%	73%
Justified TEV/UFCF	25.0x	LTM+9Y	8%	73%

Forecasted Profitability

Revenue	NOPLAT	Invested capital	UFCF
$26.10	-$5.22	$29.32	$4.18
$31.42	$2.44	$47.39	-$1.72
$38.62	$3.94	$52.13	-$0.79
$46.37	$4.68	$57.66	-$0.86
$54.45	$5.81	$63.67	-$0.20
$62.86	$7.04	$71.97	-$1.27
$71.81	$7.94	$79.24	$0.67
$80.19	$9.05	$85.85	$2.44
$88.40	$9.96	$92.46	$3.35
$95.20	$10.56	$100.08	$2.94

Valuation

	ROIC	WACC	EVA	Enterprise Value	Total Debt	Other claims	Equity	Adjusted Price
LTM	-13.5%	9.5%	-$5.14	$60.51	$0.99	$1.24	$58.29	$6.28
LTM+1Y	5.4%	9.7%	-$1.96	$67.02	$0.99	$5.73	$60.31	$6.66
LTM+2Y	8.3%	9.7%	-$0.60	$75.83	$0.99	$9.17	$65.68	$7.29
LTM+3Y	9.0%	9.4%	-$0.27	$84.33	$0.99	$10.67	$72.67	$8.16
LTM+4Y	10.0%	9.4%	$0.38	$93.21	$0.99	$9.73	$82.49	$9.31
LTM+5Y	11.0%	9.5%	$1.06	$104.05	$0.99	$8.42	$94.65	$10.68
LTM+6Y	11.0%	9.6%	$1.06	$113.26	$0.99	$4.31	$107.96	$12.16
LTM+7Y	11.4%	9.7%	$1.37	$121.98	$0.99	-$2.43	$123.43	$13.88
LTM+8Y	11.6%	9.9%	$1.55	$130.92	$0.99	-$10.82	$140.76	$15.73
LTM+9Y	11.4%	9.9%	$1.40	$140.08	$0.99	-$19.27	$158.36	$16.82

Monte Carlo Simulation Assumptions

	Base	Stdev	Min	Max	Distribution
Revenue Variation	0	10%	N/A	N/A	Normal
Op. Costs Variation	0	10%	N/A	N/A	Normal
Market Risk Premium	6%	N/A	5%	7%	Triangular
Long term Growth	5%	N/A	-6%	7%	Triangular
Terminal Value	0	0.1	N/A	N/A	Normal

Monte Carlo Simulation Results

	Intrinsic Value	1y-Target
Mean est.	$6.28	$6.66
σ(ε)	$0.32	$0.25
3 σ(ε) adjusted price	$5.32	$5.91
Current Price	$4.69	
Analysts' median est.		$9.00