

Analyzing Alternative Energy Stocks

According to StockDiagnostics.com's cash flow metrics, only four alternative energy companies are worth buying. Yes, four.

BY MICHAEL MARKOWSKI

Surging oil prices over the last several years have increased the demand for alternative energy as well as the visibility of public alternative energy companies. Given this supportive environment, I thought it would be

interesting to examine how these companies are positioned in the market. My list includes a total of 53 alternative energy industry companies that file annual and quarterly reports with the SEC.

Alternative Energy Industry Public Companies

Symbol	Name	Alt. Energy	Mkt cap	Curr. price	1YR High	1YR Low	5YR High	5YR Low	CFFO TTM	CFFO % Incr/Decr
AVA	AVISTA CORP	Fuel Cell	1.29B	24.82	27.52	18.01	27.52	8.75	pos	-25.61
VSE	VERASUN ENERGY CORP	Ethanol	1.38B	18.45	30.75	14.88	30.75	14.88	pos	NA
GTI	GRAFTECH INTL LTD	Fuel Cell	656M	6.48	7.8699	4.23	16	2.35	pos	906.48
ORA	ORMAT TECHNOLOGIES INC	Geothermal	1.44B	38.02	43.94	27.32	43.94	13.88	pos	-67
MGPI	MGP INGREDIENTS INC	Ethanol	359M	21.89	36.08	12	36.08	2.93	pos	-13.08
ULBI	ULTRALIFE BATTERIES INC	Batteries	170M	11.32	14	8.25	24.96	1.545	pos	180.18
SPWR	SUNPOWER CORP	Solar	2.97B	35.98	45.09	23.75	45.09	23.75	pos	NA
SPIR	SPIRE CORP	Solar	64M	7.8926	11.14	6.1917	13.37	1.7	pos	196.6
NVIC	N-VIRO INTL CORP	Waste	11M	3.1	3.75	0.6	4.01	0.2	pos	70.57
NGP	NEVADA GEOTHERMAL POWER INC	Geothermal	30M	0.58	1.1	0.5775	1.1	0.16	pos	NA
AWNE	AMERICAS WIND ENERGY CORP	Wind	51M	2.27	2.3	1.5	2.3	1.5	neg	92.1
SORD	SOUTHRIDGE ENTERPRISES INC	Ethanol	19M	0.37	1.9	0.07	1.9	0.07	neg	NA
ICPR	ICP SOLAR TECHNOLOGIES INC	Solar	64M	2.24	2.55	0.85	2.55	0.02	neg	-8.25
GPRE	GREEN PLAINS RENEWABLE ENERG	Ethanol	134M	22.35	63.5	16.63	63.5	16.63	neg	NA
SYNI	SYNGAS INTL CORP	Fuel Cell	11M	0.3	0.82	0.28	4.75	0.15	neg	NA
BBDS	BETTER BIODIESEL INC	Biofuel	183M	6	14.5	1.3	14.5	1	neg	-30.32
PFCE	PACIFIC FUEL CELL CORP	Fuel Cell	16M	0.24	0.48	0.13	0.95	0.013	neg	-107.79
MHTX	MANHATTAN SCIENTIFICS INC	Fuel Cell	3M	0.0159	0.075	0.012	0.53	0.012	neg	34.21
FSYS	FUEL SYS SOLUTIONS INC	Biogas	315M	20.83	24.98	9.96	33.64	3.52	neg	-104.65

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SOEN	SOLAR ENERTECH CORP	Solar	62M	0.789	2.18	0.66	2.18	0.66	neg	-1161.11
ARGY	ALTERNATE ENERGY CORP NEV	Fuel Cell	9M	0.07	0.34	0.05	5.3899	0.05	neg	7.07
IHDR	INTERNAL HYDRO INTL INC	Waste	11M	0.1	0.71	0.0005	2.81	0.0005	neg	-68.25
ASRNF	ASTRIS ENERGI INC	Fuel Cell	1.5M	0.0374	0.29	0.0161	1.11	0.0161	neg	-12.72
EPOI	EPOD INTL INC	Solar	10M	0.14	0.95	0.12	2	0.12	neg	-40.02
IESV	INTREPID TECHNOLOG & RES INC	Biofuel	14M	0.059	0.114	0.04	0.365	0.0019	neg	15.93
ESIV	ESSENTIAL INNOVATIONS TECH	Geothermal	3.5M	0.12	0.84	0.09	1.07	0.09	neg	-662.26
XSNX	XSUNX INC	Solar	64M	0.41	2.91	0.32	2.91	0.005	neg	-85.04
UQM	UQM TECHNOLOGIES INC	Energy Efficiency	69M	2.74	6.462	2.19	6.462	1.55	neg	-71.6
HYDP	HYDROGEN POWER INC	Fuel Cell	20M	1.5	6.17	1.2	24.5995	1.2	neg	-27.79
EFTI	EARTHFIRST TECHNOLO- GIES INC	Fuel Cell	37M	0.062	0.2399	0.04	0.38	0.025	neg	10.62
XNL	XETHANOL CORP	Ethanol	61M	2.24	16.18	2.17	16.18	1	neg	NA
HYEG	HYDROGEN ENGINE CTR INC	Fuel Cell	78M	3	23.5	2.35	23.5	0.0395	neg	NA
LMEC	LIME ENERGY CO	Energy Efficiency	50M	1	16.7992	0.7	40.648	0.7	neg	-1.32
HYDG	HYDROGEN CORP	Fuel Cell	62M	4.9	9.75	3	762.5	3	neg	NA
OTD	02DIESEL CORP	Biofuel	65M	0.89	2.97	0.4	3.73	0.37	neg	-16.81
MCEL	MILLENNIUM CELL INC	Fuel Cell	44M	0.89	2.05	0.77	7.25	0.77	neg	10.95
OEGY	OPEN ENERGY CORP	Solar	47M	0.61	2.15	0.281	2.53	0.0033	neg	-1846.12
EPG	ENVIRONMENTAL PWR CORP	Waste	72M	7.51	10.7	3.54	10.7798	1.19	neg	-161.97
DYMTF	DYNAMOTIVE ENERGY SYS CORP	Biomass	165M	1.05	1.76	0.78	1.76	0.135	neg	-7.86
MKTY	MECHANICAL TECHNOLO- GY INC	Fuel Cell	64M	1.69	5	1.27	7.97	0.7	neg	8.37
ALTI	ALTAIR NANOTECHNOLO- GIES INC	Fuel Cell	179M	2.6	4.64	1.99	6.52	0.3	neg	-99.47
MXWL	MAXWELL TECHNOLOGIES INC	Batteries	240M	13.92	23.35	12.4	23.35	4.05	neg	-86.24
ENER	ENERGY CONVERSION DEVICES INC	Solar	1.30B	33.27	57.84	29.03	57.84	6.75	neg	53.88
EBOF	EARTH BIOFUELS INC	Biofuel	137M	0.64	7.23	0.32	7.23	0.1683	neg	NA
DESC	DISTRIBUTED ENERGY SYS CORP	Fuel Cell	153M	3.9	11	2.9	11	1.54	neg	-23.35
ACPW	ACTIVE POWER INC	Flywheel	130M	2.6094	5.91	1.76	7.88	0.98	neg	15.83
QTWW	QUANTUM FUEL SYS TECH WORLDW	Fuel Cell	107M	1.67	5.22	1.45	10.58	0.9	neg	20.31
AMSC	AMERICAN SUPERCON- DUCTOR CORP	Energy Efficiency	321M	9.64	11.8899	6.73	19.95	2.0975	neg	-41.55
ESLR	EVERGREEN SOLAR INC	Solar	499M	7.33	17.5	7.1	17.5	0.44	neg	-219.15
HYGS	HYDROGENICS CORP	Fuel Cell	114M	1.25	4.4	1.21	10.32	1.21	neg	17.38
BLDP	BALLARD PWR SYS INC	Fuel Cell	627M	5.49	13.14	4.08	38.5	3.4	neg	68.08
PLUG	PLUG POWER INC	Fuel Cell	330M	3.81	6.6	3.53	13.1	3.39	neg	-11.58
CPST	CAPSTONE TURBINE CORP	Geothermal	119M	1.15	4.47	1.14	6.23	0.51	neg	-7.56

NA: Comparative data not available – neg: negative – pos: positive

I used StockDiagnostics.com's proprietary cash flow metrics to determine the true health (the winners and sinners) of the industry's companies. Cash flow metrics are the key to analyzing any emerging industry, especially the alternative energy sector since only six of the companies studied here reported positive earnings over their most recent 12 months. Cash flow generally turns positive before earnings, and thus can be used as a leading indicator for industries and companies that don't have a history of reporting consistent earnings. (In 2002 and 2003, we used StockDiagnostics' proprietary cash flow metrics to determine the winners and the sinners among the mostly unprofitable web companies after the bursting of the dot com bubble). Of these 53 alternative energy companies, 43 generated negative cash flow from operations (CFFO), and ten generated positive CFFO over their most recent 12 months.

Winners

As for winners, I only found four of them. To qualify, the company had to be trading well below its all time high, have positive CFFO and have increased its CFFO compared to its most recent 12 months.

The company with the largest market cap and the best liquidity among the four winners is GrafTech International Ltd. (NYSE:GTI). GrafTech offers graphite products that enable thermal management solutions for the electronics industry and fuel cell solutions for the transportation and power generation industries. GrafTech is particularly interesting because it's trading well below its ten year high of \$50.50 in October 1997, and it appears that the recent significant positive changes in its cash flow metrics—including an increase of over 900% in its CFFO over its last 12 months—have not yet

been reflected in its share price.

The winner with the smallest market cap, which also has the lowest share price, is Ohio-based N-Viro International Corporation (OTCBB:NVIC). N-Viro shares traded at an all-time high of \$40 in October 1993. Its primary business is converting



millions of tons of sludge (treated waste water or sewage) into N-Viro Soil for municipalities. N-Viro has steadily increased its CFFO for its last four consecutive trailing twelve month periods dating back to September 2003. And for its most recent 12 months, its CFFO increased by over 70%. (In the interests of full disclosure, a member of

my family currently owns and has owned N-Viro shares since 2005.)

The third winner is Spire Corporation (Nasdaq:SPIR). Its shares hit an all time high of \$13.37 in July 2005. Spire is a diversified technology company that provides solar energy manufacturing equipment and solar systems, biomedical devices and optoelectronic components. Spire's CFFO has increased by over 196% over its latest 12 months.

My last winner is Ultralife Batteries (Nasdaq:ULBI). Its shares hit an all time high of \$24.75 in September 1995.

Ultralife provides high-energy power systems for various applications. The company makes a range of batteries, charging systems and accessories for use in military, industrial and consumer portable electronic products.

Ultralife's CFFO increased by over 180% in its most recent 12 months.

Sinners

At first blush, SunPower (Nasdaq:SPWR) looks like a big winner and a safe bet on the alternative energy industry. Its shares are near their all time high of \$44.07. It has a market cap of \$2.97 billion (the largest market cap for any alternative energy company that I am aware of), and Cypress Semiconductor (NYSE:CY) owns 75% of its shares. It also just announced that it had become profitable. What's not to like here? An examination of its cash flow statement indicates that serious problems are ahead for SunPower and Cypress, its largest shareholder, for several reasons:

First, SunPower generated earnings of \$14.5 million over its 12 months ended September 30, 2006. Over the same period it generated CFFO of only \$4.5 million. This is not a good omen as a healthy company's CFFO should generally be higher than its earnings.

Upon further examination, I found that even this increase in its CFFO was

attributable to it increasing its payables, which is another bad omen. Increasing payables accounts for cash flow growth is indicative of a company delaying the paying of its payables. This is likely what has been happening at SunPower, since its increase in its current liabilities was greater than the increase in its costs and expenses for its latest quarter.

institutional shareholders, Chapman Capital, publicly prodded Cypress to sell its semiconductor business via a leveraged buyout for \$12 per share. Including SunPower's market value, Chapman believes that the sum-of-the-parts value of Cypress could be more

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Even worse, I found that its increase in receivables, by over \$13 million for the quarter ended September 30, 2006, actually exceeded the \$11 million increase of its revenues in the same quarter. This indicates that SunPower's receivables are ballooning and that they are having difficulties in collecting them.

Lastly, SunPower generated negative free cash flow of -\$83.6 million over its 12 months ended September 30, 2006. Given SunPower's current burn rate, its ballooning and harder to collect receivables and its recent announcement that it intends on utilizing \$130 million of its cash to purchase a privately held company, I project that SunPower could be out of cash by the end of 2007.

Cash flow problems for SunPower do not bode well for its parent Cypress Semiconductor, recently trading at \$17 per share. Cypress itself generated a \$20 million in free cash flow over its most recent 12 months ended September 30, 2006. One of Cypress'

than \$22 a share, which means that Chapman believes that the sale or spin off of SunPower could generate \$10 per share in value for Cypress shareholders.

Cypress and SunPower probably still have enough credibility to raise more capital from Wall Street to cover the cash shortfall. However, the issue remains as to whether or not SunPower has a viable business model that can generate sustainable cash flow on its own. Based on my past experience with AstroPower, a former publicly traded solar energy company that I accurately predicted would go bankrupt, I bet it will be difficult for SunPower to develop a viable business model.

StockDiagnostics.com issued a warning on AstroPower in May of 2002 at \$22.63 per share. It filed for bankruptcy in 2004, and its shares no longer trade. Thus, I believe that the \$5.00 per share premium on Cypress shares is not justifiable at this time.

My second sinner is Fuel Systems Solutions, Inc., (Nasdaq:FSYS). After reporting record earnings of \$0.24 per share on November 9, 2006 for its third quarter ended September 30, 2006, Fuel Systems shares responded by gapping from \$15.23 to a high of \$22.78 on December 28. Now that its shares are approaching a two-year high, the problem is that its earnings for the quarter and for the previous quarter are cashless. In utilizing

StockDiagnostics' cash flow diagnostics, I discovered that Fuel Systems generated a CFFO of \$10,788,000 and a free cash flow of \$15,705,000 for its six months ended September 30, 2006. This compares to reported earnings of \$4,715,000 for the same comparable period. Based on its burn rate of over \$7.5 million per quarter, I examined its balance sheet and found that its cash dwindled from \$27 to \$13 million over the past nine months. Yet its current liabilities have risen from \$66.3 to \$68.0 million over the same period. Given this situation, Fuel Systems will probably start having cash flow difficulties in the first half of 2007.

The Bottom Line

The bottom line here is that winners' shares are trading at a discount due to their low earnings visibility, and the sinners' shares are trading at a premium due to their high earnings visibility. Finally, the sinners' shareholders are at an extremely high risk because a company reporting record earnings generally leads investors to believe that it's doing well, but if it has a negative cash flow, it actually isn't. Conversely, the winners' shares have the lowest risk because they have no earnings visibility and generally trade at a discount when compared to their growth in CFFO.

As for the 47 that aren't discussed here, they may not be the biggest sinners, but they certainly aren't winners. Stay tuned.